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Forest

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North Revilla Final Environmental Impact Statement

Ketchikan Pulp Company Long-Term Timber Sale Contract

Volume V: Appendix L

Appendix L

Response to Public Comments

NORTH REVILLA EIS

PUBLIC COMMENTS ON DEIS

Introduction

1 **Cost Effectiveness of Timber Harvest Operations**

Facets:
- A - Economical harvest for KPC
- B - Helicopter logging should be limited to that which is economically feasible and where conventional cable yarding systems will not work
- C - Construction costs are excessive (roads,bridges & LTF's)
- D - Helicopter logging cost estimates are too low.
- E - Alternatives to clearcutting.
- F - Don't subsidize KPC
- G - Yarding units with leave islands/snag patches is less efficient-cost factors should be added
- H - Proportionality/Inaccurate TIMTYP maps
- I - Don't export unprocessed timber (round logs)
- J - Volume per acre estimates are too high
- K - Opportunities for shovel logging were not identified
- L - Second-growth management inadequately addressed
- M - Units should be larger or smaller
- N - Regeneration concerns in low volume stands
- O - Temporary road miles should be displayed
- P - Margaret Bay to Traitors Creek/Fire Cove road connection
- Q,R - Virgin Bay to SW Neets road connection, North
- Traitors to SW Neets road connection
- S - Neets Bay to Shrimp Bay road connection
- T - Modify alternatives 3 & 6 to include upper Klam Creek and Neets Valley units and roads
- U - Specific comments on the North Revilla DEIS

2 **Fish Habitat and Water Quality**

Facets:
- A - The effectiveness of BMP's and riparian buffers in protecting fish habitat and water quality
- B - The Southern Southeast Regional Aquaculture Association (SSRAA) fish hatchery at Neets Bay, Forest Science research in Margaret Creek, and important fisheries in Traitors Creek need protection
- C - Fish/Watershed management recommendations should be site specific
- D - Watershed cumulative effects analysis needs to be addressed
- E - Areas or units with high potential for landslides should be modified or deleted
- F - Mitigation measures for fish habitat and watershed resources should be included in this plan

G - Monitoring of BMP's should be included in the plan
H - Effects on salmon habitat need to be addressed
I - Specific comments on the North REvilla DEIS

3 Recreation and Scenic Quality

Facets: A - Maintain or expand roaded recreation opportunities
B - Timber harvest activities affect recreational experiences
C - No additional wilderness or recreational land-use designations should be made
D - Logging affects scenic quality along North Behm Canal, Neets BAy, Gedney Pass and Hassler Pass
E - Logging activity noise levels affect recreational experiences

4 Wildlife

Facets: A - Decline in wildlife populations/habitats
B,D,X - Fragmentation of the old-growth forest and connectivity of the remaining patches
C - Clearcuts are good for deer hunting and wildlife
E - Biological Assessment not available for review
F - Harvest data not accurate
G,H - More discussion of effects on mountain goats, bats and flying squirrels
I - Wildlife habitat capability models are flawed
J - Sea lion haulout rock on Nose Point (north of Neets Bay
K - Wildlife islands are not effective mitigation for wildlife
L - Precommercial thinning and grass seeding not effective mitigation for wildlife-use timber or soils funds
M - Road densities are too high-need more analysis
O - Goshawk sightings and surveys
P - What are the impacts to marbled murrelets, harlequin ducks, marine mammals, and rare plants; what surveys have been done and what mitigation measures are used
Q - The two new LTF's in Traitors Cove will significantly affect wildlife and shellfish
S - Brown Creepers are not abundant and have declined drastically
R,T - Old growth retention
U - Wildlife island or snag patch locations
V - Add wolf as MIS
W - Goshawk management procedures are vague

N,Y - What are the mitigation measures for bald eagles; i.e. Hassler Island LTF and LTF Site # 18

Z - Misty Fiords Wilderness does not necessarily supply quality wildlife habitat required by old-growth dependent species

AA - Correct marbled murrelet population estimate for Southeast Alaska

BB - Compare ADF&G Deer Population Ojectives to habitat capabilities resulting from the proposed project

CC - More clearly explain the effects of logging on deer

DD - Patch Size Effectiveness Maps-differenciate the blocks that are greater than 1,000 acres

EE - Sustainable harvest rate for otter should be 20 percent

FF - Need more baseline data and wildlife surveys

GG - Muskegs and second growth are not viable corridors

HH - Deer pellet surveys are part of the deer model and are very inaccurate

II - Include discussion of the viable population committee

JJ - Unit specific comments on the North Revilla DEIS

5 **Subsistence**

Facets: A,B - Traitors Cove, Neets Bay, Margeret Creek and Lake,
E,F Klu and Shrimp Bay are all important subsistence areas

C - Harvest timber somewhere else because of impacts to subsistence

D - TRUCS data not accurate

G - Hassler Island is an important subsistence fishing area

H - No subsistence alternative

I - All action alternatives will negatively affect my subsistence life style

J - Inadequate information on subsistence use of the project area

K - Don't connect the Margaret Lake road to Traitors; will increase competition from people at the camp

L - Disagree with the statement "No impact to subsistence because no beach fringe is proposed for harvest"

M,V,X - Native clans still use traditional areas that have been used for hundreds of years

N - Identify the mitigation measures necessary to maintain human access to shrimp, crabs and sea cucumbers

O - Page 224 "Alt. 2 through 6 will not represent a significant possibility of a significant restriction on subsistence use of deer and certain furbearers" conflicts with other statements

P - Analyze deer hunting patterns on a WAA and community basis, not just the project area
Q - Discuss deer habitat capability changes in the years 1954, 1990, 2010, and 2040
R - Project a future increase in demand for deer
S - Analyze overall cumulative forest wide effects of logging
T - Display mapped analysis of deer supply vs. demand over the next 50 years
U - Is the restriction on sport hunting of deer a recommendation or a possible mitigation measure
W - No Native subsistence users helped to write the North Revilla draft EIS
Y - Subsistence users have priority use of the resources under ANILCA

6 **Social and Economic Effects**

Facets: A - Supply the volume needed to sustain the local mills and meet the Long-term Sale obligations
B - Need a reasonable timber base to support economic stability of SE Alaska
C - Need a supply of old growth for value added products
D - NFMA requires an economic analysis based on PNV
E - Expand discussion on infrastructure needs for Ketchikan (housing, schools, etc.)
F - Potential value of SSRAA hatchery and Traitors Cove fish runs
G - Implementation of this project will provide jobs
H - Special interest groups have too much influence on timber sales
I - Supply the demand for wood products
J - Specific comments on the North Revilla DEIS

7 **Marine Environment**

Facets: A - Excessive number of LTF's throughout Project Area
B - The negative impacts from the Virgin bay LTF will significantly outweigh any advantages
C - The negative impacts from the North Traitors LTF will significantly outweigh any advantages
D - Inadequate analysis of the effects of the project upon the marine environment
E - General concerns expressed about the Klu & Shrimp Bay LTF's
F - What impact will this project have on the SEAFAC underwater testing facility near Back Island
G - Effectiveness of LTF siting BMP's to minimize adverse impacts of LTF's

8 Change TLMP Land Use Designations

9 Evaluate the transportation link

10 Development outside the Project Area

11 Eliminate below cost timber sales

12 Determine timber supply and demand

13 Extend public comment deadline for the DEIS

14 Prepare a new analysis
- Write a new EIS or prepare a supplement to the DEIS
- Write a programmatic EIS for Revilla Island

15 Range of alternatives

16 Multiple Use and Sustained Yield

17 Karst and Minerals
- Karst features need to be protected
- Mines and claims need to be listed in the document

18 No unit expansion

19 Cultural Resource Protection

20 Purpose and Need (200 MMBF)
- Purpose and Need too narrow
- Purpose and Need decision was made outside NEPA
- Incorrect interpretation of TTRA and as a result Appendix A
- is flawed

21 Unit Cards

22 Better Maps

23 Clean Air Act--The effect of the prescribed burning upon the local ambient air quality

24 Tiering and Referencing
- The EIS improperly tiers to the TLMP SDEIS
- Incorporating public comments by reference

25 Operational Safety Concerns
- Road construction through the SSRAA Facility
- Logging operations

26 Access Management

REFERENCES FOR APPENDIX L

LIST OF COMMENTERS

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
SS9	ABBOTT	THOMAS	SAXMAN	AK	SAXMAN ADIVSORY COM.
352	ABELL	WARREN	KETCHIKAN	AK	
445	ACHBERGER	CHARLES	JUNEAU	AK	
620	ADAMS	FARREL	KETCHIKAN	AK	
381	ADAMS	JAMES	PETERSBURG	AK	
692	ALLEN	ALICE	KETCHIKAN	AK	
731	ALLEN	DAN	KETCHIKAN	AK	
793	ALLEN	DEAN	KETCHIKAN	AK	
574	ALLEN	JOHN	KETCHIKAN	AK	
95	ALLPHIN	CRYSTAL	WARD COVE	AK	
24	ALLPHIN	GERALD	WARD COVE	AK	
72	ALLPHIN	RICK	WARD COVE	AK	
26	ALLPHIN	SALLY	WARD COVE	AK	
386	ALSUP	RUSTIN	WARD COVE	AK	
820	AMMONS	RICHARD	KETCHIKAN	AK	
278	AMUNDSON	ROGER	WARD COVE	AK	
217	ANDERSON	JODI	KETCHIKAN	AK	
8	ANDERSON	RICK	METLAKATLA	AK	
286	ANDREW	KEVIN	KETCHIKAN	AK	
32	ANNISKETT	RALPH	METLAKATLA	AK	KETCHIKAN ADVISORY COM.
634	APGER	LYLE	KLAWOCK	AK	
349	ARRIOLA	NORMAN	KETCHIKAN	AK	
58	ATKINSON	LESTER	METLAKATLA	AK	
550	ATKINSON	REGGIE	METLAKATLA	AK	
555	ATWOOD	RICHARD	WARD COVE	AK	
798	ATWOOD	SHELLEE	WARD COVE	AK	
577	AULLERICH	D.	CORVALLIS	OR	
674	AUSTIN	ROZELL	TACOMA	WA	
16	AVENSON	DAN	METLAKATLA	AK	
341	BALDASSIN	JAMES	KETCHIKAN	AK	
724	BANIE	ELIZABETH	NEETS BAY	AK	
742	BANIE	MARK	NEETS BAY	AK	
658	BANKS	RICHARD	KODIAK	AK	
45	BARNDT	JAMES	TICTON	WA	
489	BARNES	LEONARD	CRAIG	AK	
638	BARNHART	EDDIE	WOODLAND	WA	
234	BARRETT	DERA	KLAWOCK	AK	
649	BARRIER	KATHERINE	KETCHIKAN	AK	
81	BARRON	MICHAEL	KETCHIKAN	AK	
293	BASKETT	ALICE	KETCHIKAN	AK	
281	BASKETT	ANTONE	KETCHIKAN	AK	
221	BASKETT	BILLIE	KETCHIKAN	AK	
286	BASKETT	PATRICK	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
322	BAUER	ROBERT	KETCHIKAN	AK	
169	BEALS	GEORGE	WARD COVE	AK	
438	BEATTIE	CONNIE	HOONAH	AK	
495	BEATTIE	JAY	HOONAH	AK	
764	BEAUPRE	WAYNE	KETCHIKAN	AK	
194	BECK	BARBARA	THORNE BAY	AK	
193	BECK	CHARLES	THORNE BAY	AK	
787	BECKLEY	DAVE	WRANGELL	AK	
75	BEECHER	PERRY	CORDOVA	AK	
53	BEGALKA	WALTER	KETCHIKAN	AK	
396	BEIMLER	LEO	WARD COVE	AK	
395	BELANICH	ROBERTA	KETCHIKAN	AK	
656	BELL	CAROLYN	KETCHIKAN	AK	
657	BELL	DONALD	KETCHIKAN	AK	
683	BELL	HARVEY	KETCHIKAN	AK	
111	BENNER	CLAYTON	KETCHIKAN	AK	
210	BENNETT	CAROLYN	METLAKATLA	AK	
233	BENNETT	GAIL	METLAKATLA	AK	
463	BENNETT	JILL	WARD COVE	AK	KPC
747	BENNETT	JILL	WARD COVE	AK	
507	BENNETT	LONNIE	WARD COVE	AK	
500	BENSON	DANIEL	WARD COVE	AK	
752	BENSON	DANIEL	WARD COVE	AK	
676	BERG	CHARLES	BLODGETT	OR	
667	BERGER	ROBERT	TUCSON	AZ	
566	BERTO	BOB	KETCHIKAN	AK	
272	BETHEL	MITCH	KETCHIKAN	AK	
810	BICKAR	ANDREW JR.	COFFMAN COVE	AK	
809	BICKAR	CHERYL	COFFMAN COVE	AK	
751	BIGBEE	TIMOTHY	MARCOLA	OR	
483	BISHOP	CHARLES JR	KETCHIKAN	AK	
482	BISHOP	CHARLIE	KETCHIKAN	AK	
306	BLAIR	HOWARD	KETCHIKAN	AK	
573	BLAKE	TILDEN	COTTAGE GROVE	OR	
455	BLANCHARD	ALAN	KETTLE FALLS	WA	
33	BLANDOV	GEORGE	METLAKATLA	AK	
19	BLANDOV	HANS	METLAKATLA	AK	
153	BLANKENSHIP	RALPH	THORNE BAY	AK	
80	BLANTON	THOMAS	JUNEAU	AK	
861	BLASING	LARRY	KETCHIKAN	AK	ALASKA FOREST ASSN.
465	BLISS	ERNEST	WRANGELL	AK	
630	BLUBAUM	JOHN	THORNE BAY	AK	
103	BOGER	EDWARD	HENRIEVILLE	UT	
370	BOGGS	MIKE	PETERSBURG	AK	
700	BOHRER	RICHARD	WARD COVE	AK	
387	BOOTH	APRIL	METLAKATLA	AK	
487	BOOTH	ROBERT	METLAKATLA	AK	
556	BORELL	STEVEN	ANCHORAGE	AK	
457	BOWEN	JIMMIE	YAKIMA	WA	
458	BOWEN	VICKI	YAKIMA	WA	
475	BOYER	CHAD	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
323	BRANE	JAMES	KETCHIKAN	AK	
36	BRENDIBLE	TOM	METLAKATLA	AK	
107	BRENNER	STEPHEN	SITKA	AK	
127	BREZINA	TIBOR	KETCHIKAN	AK	
449	BRILL	SCOTT	SITKA	AK	
298	BROWN	DONALD	SITKA	AK	
686	BROWN	ELMORE	KETCHIKAN	AK	
773	BROWN	MIKE	KETCHIKAN	AK	
792	BROWN	NANCY	SITKA	AK	
118	BROWN	ROBERTA	KETCHIKAN	AK	
211	BUCHANAN	LETA	DARRINGTON	WA	
294	BUCKNELL	ROBERT	KETCHIKAN	AK	
86	BULLINGTON	LYNDA	KETCHIKAN	AK	
247	BULLINGTON	ZANE	KETCHIKAN	AK	
756	BURDETT	ELIZABETH	KETCHIKAN	AK	SOUTHEAST EXPOSURE
551	BURLING	JAMES	SACRAMENTO	CA	PACIFIC LEGAL FOUND.
22	BURRELL	RICHARD	PETERSBURG	AK	
367	BUSH	MICHAEL	KLAWOCK	AK	
593	BUSS	WESLEY	KETCHIKAN	AK	
710	BUSS	WESLEY	KETCHIKAN	AK	
723	BUTLER	CHEYNE	JUNEAU	AK	
361	BYERS	ROBERT	PETERSBURG	AK	
502	BYRD	TERRY	WARD COVE	AK	
141	CADIENTE	M.	KETCHIKAN	AK	
421	CAPPS	TRACY	JUNEAU	AK	
240	CARL	JOSEPH	CRAIG	AK	
803	CARLSON	WILLIAM	KETCHIKAN	AK	
SS10	CARLSON	RISA	KETCHIKAN	AK	
456	CARTER	DOROTHY	JUNEAU	AK	
853	CARTWRIGHT	MEG	KETCHIKAN	AK	
KS1	CARTWRIGHT	MEG	KETCHIKAN	AK	
126	CASEBERE	ALVIN	KETCHIKAN	AK	
284	CASEBERE	ALVIN	KETCHIKAN	AK	
753	CASTEEL	MARSHALL	KETCHIKAN	AK	
t22	CHAMBERS	THEODORE	KETCHIKAN	AK	
605	CHAMPION	ERROL	JUNEAU	AK	
226	CHANDLER	MARTIN	KETCHIKAN	AK	
733	CHAPMAN	BRUCE	KETCHIKAN	AK	
KS8	CHAPMAN	BRUCE	KETCHIKAN	AK	
776	CHAPMAN	MIKE	KETCHIKAN	AK	
544	CHEEVER	RONALD	ARLINGTON	WA	
799	CHIMENTI	RON	JUNEAU	AK	
535	CHOATE	C./V.	PACKWOOD	WA	
804	CHRISTENSEN	GENEVA	PETERSBURG	AK	
669	CHURCHILL	KENNETH	CHARLESTON	ME	
192	CLAASEN	RANDY	THORNE BAY	AK	
603	CLARE	GUY	KETCHIKAN	AK	
826	CLARK	ADELBERT	CRAIG	AK	
376	CLARK	JAMES	JUNEAU	AK	
855	CLARK	JIM	JUNEAU	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
823	CLARK	KERMIT	KETCHIKAN	AK	
616	CLEVELAND	M.E.	KETCHIKAN	AK	
485	CLEVENGER	PETER	METLAKATLA	AK	
870	CLIFTON	JOHN	KETCHIKAN	AK	
261	COADY	JACK	KETCHIKAN	AK	
578	COATS	GARY	SITKA	AK	
505	COCHRAN	KENNETH	WARD COVE	AK	
604	COGBURN	ROBERT	JUNEAU	AK	
696	COLEMAN	NORENE	KETCHIKAN	AK	
618	COLEMAN	THOMAS	KETCHIKAN	AK	
172	COLLINS	JERRY	KETCHIKAN	AK	
56	COLTON	PATTY	SITKA	AK	
765	CONNELLY	STEVE	KETCHIKAN	AK	
165	COOK	EARL	KETCHIKAN	AK	
470	COOK	MARGARET	KETCHIKAN	AK	
358	COON	D.A.	PETERSBURG	AK	
140	COOPER	DARRELL	KETCHIKAN	AK	
354	COOPER	DONALD	KETCHIKAN	AK	
452	CORREA	WILLIAM	HAINES	AK	
488	CORSMEIER	MICHAEL	METLAKATLA	AK	
665	COSS	ZACHARY	WARD COVE	AK	
517	COUNTS	HUGH	ROCHESTER	WA	
464	COVILLE	EDWARD	WARD COVE	AK	
78	COWAN	GEORGIA	WARD COVE	AK	
76	COWAN	JOHN	WARD COVE	AK	
79	COWAN	ROBERT	WARD COVE	AK	
262	CRAIG	RUTH	KETCHIKAN	AK	
348	CRAIG	TOM	KETCHIKAN	AK	
640	CRUMP	JOHN	DARBY	MT	
91	CSIKI	DAVID	KETCHIKAN	AK	
266	CUMMINGS	TED	KETCHIKAN	AK	
48	CURRAN	WILLIAM	NOME	AK	
372	DAHLIN	ELWOOD	WRANGEL	AK	
486	DALTON	CALVIN	JUNEAU	AK	
55	DAVIDSON	WESLEY	KETCHIKAN	AK	
205	DAVIS	MARIETTA	KETCHIKAN	AK	
2	DAVIS	RONALD	KETCHIKAN	AK	
316	DAVIS	RUSS	KETCHIKAN	AK	
1	DAVIS	WALLY	KETCHIKAN	AK	
703	DAY	WILLIAM	LEWISTON	ID	
185	DEAN	JERRY	WARD COVE	AK	
28	DENDAS	MARTIN	METLAKATLA	AK	
54	DERRICK	TRACY	SITKA	AK	
872	DEWITT	NORA	KETCHIKAN	AK	SAXMAN IRA COUNCIL
436	DICKEY	DARLENE	KETCHIKAN	AK	
301	DIVERTY	JAMES	KETCHIKAN	AK	
388	DIX	W.E.	KETCHIKAN	AK	
562	DOIG	CLAIRE	OLYMPIA	WA	
721	DOUGHTERTY	WILLIAM	JUNEAU	AK	
759	DOYEN	JUDI	NEETS BAY	AK	
760	DOYON	DONALD	NEETS BAY	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
303	DREYER	HAROLD	KETCHIKAN	AK	
318	DRUMMOND	MIKE	KETCHIKAN	AK	
345	DUNDAS	DANIEL	METLAKATLA	AK	
484	DUNDAS	RICHARD	METLAKATLA	AK	
196	DUNLAP	JAMES	FAIRBANKS	AK	
693	DUNNING	EARL	KETCHIKAN	AK	
255	DUPRETTE	ROBERT	WARD COVE	AK	
229	DURETTE	COREY	WARD COVE	AK	
230	DURETTE	JACQUELINE	WARD COVE	AK	AK WOMEN IN TIMBER
675	EARLY	ROLLAND	SUNVALLEY	NV	
622	EASOM	CHARLES	KETCHIKAN	AK	
627	EASON	LINDA	KETCHIKAN	AK	
224	EASTHAN	WILLIAM	KETCHIKAN	AK	
360	EDENSHAW	ANTHONY	SITKA	AK	
59	EDWARDS	BARNEY	METLAKATLA	AK	
611	ELIAS	RICHARD	KETCHIKAN	AK	
159	ELKINS	NANCY	KETCHIKAN	AK	
362	ELLIOT	DARYL	WARD COVE	AK	
363	ELLIOT	ROBERT	WARD COVE	AK	
691	ELMER	MIKE	KETCHIKAN	AK	
444	ELY	RICHARD	HOONAH	AK	
529	ENDTER	R.E.	BAINBRIDGE IS.	WA	
699	ENGLE	G.J.	WRANGELL	AK	
263	ENGMON	MONTE	WARD COVE	AK	
576	ERICKSON	MARK	ONALASKA	WA	
214	ETHERINGTON	WESLEY	COFFMAN COVE	AK	
410	EVANS	JAMICHEAL	KETCHIKAN	AK	
689	FAAST	DAVID	KETCHIKAN	AK	
666	FALES	ROBERT	TOK	AK	
216	FALKNER	CLARK	COFFMAN COVE	AK	
392	FAWCETT	PERRY	METLAKATLA	AK	
506	FAWCETT	ROGER	METLAKATLA	AK	
15	FAWCETT	SILAS	METLAKATLA	AK	
540	FENNIMORE	WILLIAM	SALEM	OR	
876	FERGUSON	JIM	KETCHIKAN	AK	
637	FERRIS	LINDA	PALMER	AK	
609	FIFIELD	DAVID	KETCHIKAN	AK	
589	FISK	RAYMOND	COFFMAN COVE	AK	
49	FLINT	RON	JUNEAU	AK	
144	FLYNN	BOB	SEATTLE	WA	
242	FORSBERG	ROGER	KETCHIKAN	AK	
801	FORTY	RODERICK	KETCHIKAN	AK	
39	FOUTCH	ALLAN	ANCHORAGE	AK	
490	FOX	DALTON	KETCHIKAN	AK	
968	FRANK	JOYCE	SAXMAN	AK	
219	FREEMAN	JIM	PETERSBURG	AK	
857	FREITAG	GARY	KETCHIKAN	AK	SSRAA
821	FULLER	DAVID	BEND	OR	
830	FUNK	KENT	KETCHIKAN	AK	
357	GABRIEL	JOHN	KETCHIKAN	AK	EAGLE TIMBER, INC.
615	GANS	TERRY	SUQUAMISH	WA	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
825	GARBRICK	EUGENE	JUNEAU	AK	
398	GARDNER	JOHN	KETCHIKAN	AK	
763	GARDNER	JOHN	KETCHIKAN	AK	
614	GARDNER	STAN	WARD COVE	AK	
625	GARNER	JACKSON	JUNEAU	AK	
626	GARNER	LORETTA	THORNE BAY	AK	
745	GARRETT	BLAIN	THORNE BAY	AK	
758	GASS	APRIL	NEETS BAY	AK	
754	GASS	WILLIAM	NEETS BAY	AK	
124	GATES	DAVID	KETCHIKAN	AK	U.S. DEPT. OF INTERIOR
867	GATES	PAUL	ANCHORAGE	AK	
94	GEFRE	NICHOLAS	THORNE BAY	AK	
481	GELBRICH	IAN	KETCHIKAN	AK	
480	GELBRICH	PEGGY	KETCHIKAN	AK	
334	GELBRICH	RONALD	KETCHIKAN	AK	
851	GENTRY	DONALD	JUNEAU	AK	ATIKON FOREST PROD., INC.
461	GEORGE	MICHAEL	KETCHIKAN	AK	
326	GERMAIN	HEIDI	KETCHIKAN	AK	
802	GILDERSLEEVE	MURRAY	KETCHIKAN	AK	
310	GILES	DOUGLAS	WARD COVE	AK	
336	GIRT	ROBERT	KETCHIKAN	AK	
430	GODFREY	SCOTT	CAMARILLO	CA	
446	GOODROAD	JESSE	JUNEAU	AK	
453	GOODROAD	LINDA	JUNEAU	AK	
541	GOODWIN	ALBERT	METLAKATLA	AK	
859	GRAHAM	OWEN	KETCHIKAN	AK	KPC
SS1	GRAHAM	OWEN	KETCHIKAN	AK	
448	GRAVES	MICHAEL	JUNEAU	AK	
9	GRAY	GERALD	METLAKATLA	AK	
380	GREEN	DALE	THORNE BAY	AK	
491	GRIFFIN	JAMES	WARD COVE	AK	
412	GRIFFIN	JOHN	MARYSVILLE	WA	KRUSE TRACTOR
755	GRIFFITH	CONSTANCE	KETCHIKAN	AK	
KS2	GRIFFITH	CONSTANCE	KETCHIKAN	AK	
732	GROSS	GEOFFRY	KETCHIKAN	AK	SOUTHEAST EXPOSURE
14	GUTHRIE	GLEN	METLAKATLA	AK	
37	GUTHRIE	LEANDRO	METLAKATLA	AK	
10	GUTHRIE	MICHAEL	METLAKATLA	AK	
70	GUYMON	MURL	WARD COVE	AK	
718	HAAG	WILLIAM	KODIAK	AK	
767	HACK	KEVIN	KETCHIKAN	AK	YES/MINK BAY LODGES
681	HADLOCK	DONAVON	THORNE BAY	AK	
493	HADSELFORD	SCOTT	KLAWOCK	AK	
795	HAGER	CAROLE	KETCHIKAN	AK	
796	HAGER	LARRY	KETCHIKAN	AK	
583	HAHN	CAROLE	TWO HARBORS	MN	
497	HALL	DAVID	KETCHIKAN	AK	
762	HALL	DAVID	KETCHIKAN	AK	
807	HALL	J. & A.	GIRDWOOD	AK	
433	HALVORSEN	ALBERT	BAINBRIDGE ISL	WA	
565	HALVORSEN	KENT	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
170	HALVORSEN	PETER	WARD COVE	AK	
621	HALVORSON	NORMA	KETCHIKAN	AK	
701	HALVORSON	RAYMOND	CRAIG	AK	
806	HAMANN	MICHAEL	AUKE BAY	AK	
805	HAMBY	PAUL	JUNEAU	AK	
87	HAMILTON	WILLIAM	WARD COVE	AK	
182	HANKS	JASON	KETCHIKAN	AK	
347	HANSEN	NEAL	KETCHIKAN	AK	
873	HANSON	BILL	JUNEAU	AK	
145	HANSON	RONALD	JUNEAU	AK	
663	HARBOUR	JANICE	KETCHIKAN	AK	
708	HARBOUR	SEAN	KETCHIKAN	AK	
571	HARRIS	JOHN	HOONAH	AK	
399	HARRIS	LARRY	SPRINGFIELD	OR	
447	HARTRANFT	ARDITH	WASILLA	AK	
607	HARVEY	DAVID	WARD COVE	AK	
722	HAY	DUANE	NOONAH	AK	
174	HAYES	ALLYN	WARD COVE	AK	
260	HAYES	DON	KETCHIKAN	AK	
146	HAYS	DOYLE	OAKRIDGE	OR	
771	HAYS	H.E.	SITKA	AK	
522	HAYWOOD	DELBERT	METLAKATLA	AK	
343	HAZELQUIST	DON	KETCHIKAN	AK	
179	HEIMRICH	JAMES	KETCHIKAN	AK	
68	HELLER	ROCKY	SITKA	AK	
283	HELPER	PAUL	KETCHIKAN	AK	
275	HEMMINGER	STEVEN	KETCHIKAN	AK	
377	HENDERSON	DAVID	KETCHIKAN	AK	
328	HENDERSON	JEAN	KETCHIKAN	AK	
346	HENDERSON	ROBERT	METLAKATLA	AK	
288	HENDRICKS	JAMES	KETCHIKAN	AK	
177	HENDRICKS	RAY	KETCHIKAN	AK	
709	HENDRICKSON	ARNOLD	SNOHAMISH	WA	
13	HENDRICKSON	RODGER	METLAKATLA	AK	
133	HENDRICKSON	WAYNE	KETCHIKAN	AK	
132	HENRY	RONNIE	METLAKATLA	AK	
90	HERBERT	KATHLEEN	THORNE BAY	AK	
784	HERMANNS	JEFFREY	COFFMAN COVE	AK	
592	HESS	MELANIE	KETCHIKAN	AK	
267	HILDERBRANDT	GERARD	WARD COVE	AK	
492	HILL	EDWIN	KLAWOCK	AK	
29	HILL	GEORGE	SPRINGFIELD	OR	
42	HILL	LARRY	METLAKATLA	AK	
138	HILL	RANDY	WARD COVE	AK	
697	HILLIS	SHARON	KETCHIKAN	AK	
115	HINKLE	RICHARD	THORNE BAY	AK	
713	HIRSCHBERG	RICHARD	ANCHORAGE	AK	
355	HOBSON	GORDON	JUNEAU	AK	
813	HOFFMAN	ALLEN	CRAIG	AK	
815	HOFFMAN	ALLEN	CRAIG	AK	
816	HOFFMAN	MICHAELLE	CRAIG	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
789	HOLDERMAN	GERALD	KETCHIKAN	AK	
761	HOLLYWOOD	WILLIAM	KETCHIKAN	AK	
546	HOLM	TERYL	BEND	OR	
584	HOLMES	MICHAEL	LA GRANDE	OR	
31	HOLT	JAMES	CHEHALIS	WA	
727	HOLUM	ORVEL	KETCHIKAN	AK	
67	HORNE	DONNA	METLAKATLA	AK	
479	HOUTS	MICHAEL	KETCHIKAN	AK	
308	HOVDEN	JACK	WARD COVE	AK	
808	HOWARD	ROD	CRAIG	AK	
66	HOWELL	CORINNE	METLAKATLA	AK	
65	HOWELL	GARY	METLAKATLA	AK	
443	HOWELL	RICHARD	METLAKATLA	AK	
280	HUBBARD	ALLAN	KETCHIKAN	AK	
383	HUFF	DAVID	WARD COVE	AK	
314	HUFF	MARK	WARD COVE	AK	
560	HUFFMAN	JEFFRY	CORDOVA	AK	
62	HUTCHENS	CHARLES	METLAKATLA	AK	
688	HUTCHENS	WILLARD	CRAIG	AK	
332	HUXTABLE	SHARON	WARD COVE	AK	
786	ISLEY	ELZIE	KETCHIKAN	AK	
KS6	ISLEY	ELZIE	KETCHIKAN	AK	
379	ISOM	PETE	THORNE BAY	AK	
524	ISON	SHARON	GLIDE	OR	
220	ISRAELSON	DAVID	PETERSBURG	AK	
204	IZATT	GENE	KETCHIKAN	AK	
155	JACKSON	RUSSELL	KAKE	AK	
811	JACKSON	SABRINA	NORTH POLE	AK	
297	JACOBS	DENNIS	HAINES	AK	
631	JACOBSON	ALAN	KETCHIKAN	AK	
472	JAMES	ALEXANDER	YAKUTAT	AK	
654	JAMES	MERLE	WARD COVE	AK	
73	JAMES	SHELDON	YAKUTAT	AK	
30	JAUREGUI	RALPH	METLAKATLA	AK	
780	JENSEN	J.E.	KETCHIKAN	AK	
829	JEROME	LINDVACH	SITKA	AK	
770	JIRSCHELLE	PATRICK	KETCHIKAN	AK	GREEN PARTY
743	JOHNSON	AL	KETCHIKAN	AK	
567	JOHNSON	CARL	SITKA	AK	
772	JOHNSON	D.A.	KETCHIKAN	AK	
624	JOHNSON	DAVID	THORNE BAY	AK	
477	JOHNSON	EDWIN	KETCHIKAN	AK	
800	JOHNSON	JEFF	JUNEAU	AK	
401	JOHNSON	LINDA	MATLOCK	WA	
661	JOHNSON	ROBERT	JUNEAU	AK	
93	JOHNSTON	LARRY	WARD COVE	AK	
291	JOHNSTON	LARRY	KETCHIKAN	AK	
18	JOHNSTON	MICHAEL	CRAIG	AK	
34	JOHNSTUN	JESS	KETCHIKAN	AK	
307	JONES	JUDY	KETCHIKAN	AK	
526	JONES	SCOTT	SEATTLE	WA	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
726	JORGENSEN	FRED	KETCHIKAN	AK	
391	KAMM	CLIFF	KETCHIKAN	AK	
741	KANNASTO	JAMES	KETCHIKAN	AK	
673	KARLS	ROBERT	EDMONDS	WA	
596	KARLSON	DANIEL	KETCHIKAN	AK	
677	KASINGER	RONNIE	KETCHIKAN	AK	
854	KATZ	DAVE	KETCHIKAN	AK	
SS6	KATZ	DAVE	KETCHIKAN	AK	
KS4	KATZ	DAVID	KETCHIKAN	AK	TONGASS CONSERVATION SOC.
160	KATZER	NINA	KETCHIKAN	AK	
408	KEEPF	CARL	KETCHIKAN	AK	
43	KENNEDY	JAMES	CORDOVA	AK	
331	KENYON	BARBARA	WARD COVE	AK	
511	KENYON	STEPHEN	WARD COVE	AK	
113	KERO	DERINDA	KETCHIKAN	AK	
11	KERO	JAMES	METLAKATLA	AK	
89	KERO	NICK	KETCHIKAN	AK	
206	KESSLER	ROBIN	KETCHIKAN	AK	
212	KETAH	DAVE	KETCHIKAN	AK	
213	KETAH	DAVE JR	KETCHIKAN	AK	
498	KIFFER	KARLEEN	KETCHIKAN	AK	
501	KIFFER	KENNETH	KETCHIKAN	AK	
428	KILROE	DENNIS	AHSAHKA	ID	
52	KIMBALL	SHIRLEY	SITKA	AK	
128	KIMBERLEY	DAVID	KETCHIKAN	AK	
44	KING	DALE	METLAKATLA	AK	
426	KLAKKEN	DEAN	KETCHIKAN	AK	
600	KLINGELHUT	IVAN	KETCHIKAN	AK	
462	KLUNE	DAVID	WARD COVE	AK	
402	KNUDSEN	TIMOTHY	FIG HARBOR	WA	
149	KOLKOW	JOE	KETCHIKAN	AK	
610	KORFF	LAMONT	KETCHIKAN	AK	
439	KRAUSE	RICHARD	KETCHIKAN	AK	
439	KRAUSE	RICHARD	KETCHIKAN	AK	
417	KRINGEN	ROGER	ELMA	WA	
425	KRUEGER	JEFF	JUNEAU	AK	
716	KULMAN	JOE	KETCHIKAN	AK	
SS4	KUSHNIK	MATILDA	SAXMAN	AK	
129	LABUHL	DAVID	KETCHIKAN	AK	
503	LAMB	CLAYTON	WARD COVE	AK	
652	LAMB	MARY	KETCHIKAN	AK	
651	LAMB	RICHARD	KETCHIKAN	AK	
190	LANDRUS	JAMES	WARD COVE	AK	
680	LANE	JOHN	New PT. RITCHEY	FL	
390	LANG	BRAYTON	KETCHIKAN	AK	
183	LAUFFENBERGER	EUGENE	WARD COVE	AK	
534	LAUGHLIN	BOB	HOQUIAM	WA	
530	LAVIOLETTE	FRED	METLAKATLA	AK	
860	LEE	JACK	KETCHIKAN	AK	TONGASS SPORTFISHING ASSN.
241	LEHMAN	DALE	KETCHIKAN	AK	
50	LEKANOF	RODNEY	ST. GEORGE IS.	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
239	LEMONS	LARRY	CRAIG	AK	
705	LEWIS	CHRIS	THORNE BAY	AK	
720	LEWIS	DENNIS	JUNEAU	AK	
682	LEWIS	LINDA	KETCHIKAN	AK	
725	LEWIS	RALPH	KETCHIKAN	AK	
404	LEWIS	THOMAS	KETCHIKAN	AK	
643	LHUR	BEULAH	PETERSBURG	AK	
862	LINDEKUGEL	ROBERT	JUNEAU	AK	SEACC, ATTORNEY FOR
102	LOCKHART	CHUCK	KETCHIKAN	AK	
557	LOGAN	WILLAMAE	ANCHORAGE	AK	
712	LOISELLE	ROBERT	JUNEAU	AK	
601	LOWERY	LEWIS	KLAWOCK	AK	
218	LUHR	ROBERT	PETERSBURG	AK	
351	LYBRAND	GEORGE	KETCHIKAN	AK	SOUTHEAST ENGINEERING
353	LYNCH	GREGORY	KETCHIKAN	AK	
60	LYNESS	MARVIN	SEWARD	AK	
167	MABEE	CAROLYN	COFFMAN COVE	AK	
180	MADDEN	RICHARD	WARD COVE	AK	
581	MAHAN	JOHN	ANCHORAGE	AK	
454	MAISCH	JOHN	FAIRBANKS	AK	TANANA CHIEF'S CONF., INC.
100	MAJOR	PHILLIP	METLAKATLA	AK	
SS3	MAKUA	CHRIS	KETCHIKAN	AK	
12	MARCIL	PHILLIP	METLAKATLA	AK	
736	MARSHALL	KAYLA	KETCHIKAN	AK	
781	MARSHALL	MERIDITH	KETCHIKAN	AK	S.E. ALASKA CAB CO., INC.
735	MARSHALL	NELLIE	KETCHIKAN	AK	
460	MARTIN	ELTON	METLAKATLA	AK	
311	MARTIN	J.D.	WARD COVE	AK	
290	MARTIN	JERRY	WARD COVE	AK	
17	MARTIN	NANCY	METLAKATLA	AK	
791	MARTIN	WILLIAM	KETCHIKAN	AK	
64	MARTINEZ	MARGUERITE	METLAKATLA	AK	
599	MAXWELL	MARILYN	ANCHORAGE	AK	
519	MCCARTHY	EDWARD	SITKA	WA	
302	MCCARTY	CLIFF	WRANGELL	AK	
521	MCCONNELL	CONNIE	KETCHIKAN	AK	
523	MCCORD	DAVE	KETCHIKAN	AK	
459	MCCOY	JAMES	METLAKATLA	AK	
244	MCCRACKEN	WILLARD	KETCHIKAN	AK	
528	MCDANIEL	ELLEN	COFFMAN COVE	AK	
527	MCDANIEL	WILLARD	COFFMAN COVE	AK	
788	MCDOWELL	FRANK	HAINES	AK	
619	MCFARLAND	HUBERT	KETCHIKAN	AK	
525	MCGARRIGAN	PAUL	KETCHIKAN	AK	
21	MCGRAW	JOHN	SITKA	AK	
431	MCKAY	GEORGE	ST. PAUL	OR	
38	MCKEEHAN	ROGER	METLAKATLA	AK	
365	MCKENNEY	FRANK	THORNE BAY	AK	
533	MCLANE	LYLE	JUNEAU	AK	
694	MCMAHAN	KATHY	KETCHIKAN	AK	
450	MCMAHAN	PAUL	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
161	MCNEELEY	HOWARD	THORNE BAY	AK	
664	MCNEELY	WARD	NAUKATI	AK	
728	MCQUEEN	DAN	KETCHIKAN	AK	
319	MCROBERTS	ALICE	KETCHIKAN	AK	
514	MCROBERTS	JAMES	WARD COVE	AK	
121	MEAD	ALLAN	METLAKATLA	AK	
105	MEAD	JOHN	CORDOVA	AK	
119	MEAD	JOSEPH	SEATTLE	WA	
563	MERCULIEF	BURT	ST. GEORGE IS	AK	
413	MESKE	MICHAEL	WARD COVE	AK	
88	MESKE	SANDRA	WARD COVE	AK	
738	METCALF	GERI	KETCHIKAN	AK	
739	METCALF	HENRY	KETCHIKAN	AK	
123	METTLER	JUDEE	KETCHIKAN	AK	
189	MEYERS	MARK	KETCHIKAN	AK	
559	MICKELSON	SCOTT	HOONAH	AK	
139	MILES	DAVE	WARD COVE	AK	
549	MILES	WALTER	PORT ORFORD	OR	
685	MILLER	BRAD	KETCHIKAN	AK	
684	MILLER	KATHY	KETCHIKAN	AK	
157	MILLER	RENA	KETCHIKAN	AK	
471	MILLS	RONALD	METLAKATLA	AK	
63	MILNE	LEROY	METLAKATLA	AK	
435	MILTON	ELI	METLAKATLA	AK	
785	MITCHELL	BEN	SITKA	AK	SEACC
778	MONTEITH	DANIEL	KETCHIKAN	AK	
KS7	MONTEITH	DANIEL	SAXMAN	AK	
SS7	MONTEITH	DANIEL	SAXMAN	AK	
548	MONTEITH	L.C.	DARRINGTON	WA	
874	MOORE	CRAIG	KETCHIKAN	AK	KTN AREA ST PARKS ADVIS BD
315	MORAN	WILLIAM	KETCHIKAN	AK	
531	MORIN	DONALD	THORNE BAY	AK	
532	MORIN	DORIS	THORNE BAY	AK	
748	MORIN	ROBERT	WARD COVE	AK	
645	MOSS	DAVID	KETCHIKAN	AK	
429	MOTT	LARRY	LINCOLN CITY	OR	
SS2	MUENCH	ERIC	KETCHIKAN	AK	ALASKA WOODS SERVICE CO.
704	MURCHY	JAMES	THORNE BAY	AK	BLACK BEAR CEDAR PRODUCTS
418	MURPHY	PATRICK	HAINES	AK	
350	MUZZANA	PATRICIA	WARD COVE	AK	
597	NEILSON	PATRICIA	JUNEAU	AK	
202	NELSON	CHARLES	KETCHIKAN	AK	
369	NELSON	GORDON	KETCHIKAN	AK	
406	NELSON	HYRUM	KETCHIKAN	AK	
164	NELSON	SHARON	KETCHIKAN	AK	
187	NELSON	CHARLES	KETCHIKAN	AK	
321	NERENBERG	LAWRENCE	KETCHIKAN	AK	
757	NETERER	ROD	KETCHIKAN	AK	
394	NEUMEYER	DEAN	KETCHIKAN	AK	
340	NEVEL	ROBIN	SEATTLE	WA	
243	NEWKIRK	FRANK	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
414	NEWLAND	AMY	WARD COVE	AK	
496	NEWLAND	JAMES	WARD COVE	AK	
508	NEWLAND	JAMES	WARD COVE	AK	
175	NEWMAN	DON	KETCHIKAN	AK	
23	NEWTON	STANLEY	PETERSBURG	AK	
253	NICHOLSON	KENT	KETCHIKAN	AK	
92	NICHOLSON	LYNN	THORNE BAY	AK	
186	NICHOLSON	SHERI	KETCHIKAN	AK	
598	NIELSON	LYLE	JUNEAU	AK	
3	ANONYMOUS	NONE	KETCHIKAN	AK	
4	ANONYMOUS	NONE	KETCHIKAN	AK	
99	ANONYMOUS	NONE	METLAKATLA	AK	
157	ANONYMOUS	NONE	KETCHIKAN	AK	
335	ANONYMOUS	NONE	KETCHIKAN	AK	
374	ANONYMOUS	NONE	KETCHIKAN	AK	
561	ANONYMOUS	NONE	CORDOVA	AK	
575	ANONYMOUS	NONE	CATHLAMET	WA	
827	ANONYMOUS	NONE	KETCHIKAN	AK	
828	ANONYMOUS	NONE	KETCHIKAN	AK	
831	ANONYMOUS	NONE	WARD COVE	AK	
797	NORMAN	FRED	KETCHIKAN	AK	
476	NORRIS	MICHAEL	KETCHIKAN	AK	
794	OBRIEN	MIKE	HOONAH	AK	
554	OCONNER	ROBERT	NOME	AK	
137	OGDEN	NANCY	ANCHORAGE	AK	
670	OHLSON	HARLAN	KECTHIKAN	AK	
775	OLEMAN	ERNEST	SILETZ	OR	
227	OLIVADOTI	TROY	KETCHIKAN	AK	
679	OLSEN	ROBERT	PERTERSBURG	AK	
277	OLSEN	ROGER	KETCHIKAN	AK	
295	OLSON	DARRELL	KETCHIKAN	AK	
647	OSTROM	PEGGY	KETCHIKAN	AK	
83	OWENS	ANNE	HOONAH	AK	
85	OWENS	DAVE	HOONAH	AK	
646	OWENS	DENNIS	KETCHIKAN	AK	
109	OWENS	DIANA	HOONAH	AK	
1	OWENS	DOUGLAS	KINGSTON	WA	
292	PACKET	LINDA	KETCHIKAN	AK	
17	PAHANG	URSUS	KETCHIKAN	AK	
389	PANAMA	MICHAEL	KETCHIKAN	AK	
822	PARBON	JOSEPH	TIETON	WA	
543	PARDUE	BEAUFORD	KETCHIKAN	AK	
237	PARDUN	DAVID	CRAIG	AK	
236	PARDUN	LINDA	CRAIG	AK	
473	PARKER	JOHN	KETCHIKAN	AK	
707	PARKER	LYNDA	KETCHIKAN	AK	
427	PARKER	WALTER	CORDOVA	AK	
672	PARKS	JACK	ABERDEEN	WA	
612	PARKS	MARILYN	ABERDEEN	WA	
518	PARSONS	BRUCE	GIG HARBOUR	WA	
642	PARTON	JOHN	SITKA	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
474	PAULSON	JAN	KETCHIKAN	AK	
864	PENNOYER	STEVEN	JUNEAU	AK	NAT'L MARINE FISH. SERV.
61	PESHNELL	DREW	KENAI	AK	
856	PETERSON	AL	WARD COVE	AK	SOC. OF AMERICAN FORESTERS
188	PETERSON	GLORIA	KETCHIKAN	AK	
296	PETERSON	MARVIN	KETCHIKAN	AK	
330	PETERSON	RONALD	KETCHIKAN	AK	
777	PETERSON	THOMAS	NEETS BAY	AK	
207	PICKERING	JOHN	ANCHORAGE	AK	
420	PIER	DARWIN	JUNEAU	AK	
114	PIERCE	MARILYN	COFFMAN COVE	AK	
504	PIHL	DARLENE	KETCHIKAN	AK	
312	PIHL	MARTIN	KETCHIKAN	AK	LPC
852	PIHL	MARTIN	KETCHIKAN	AK	
256	PIMENTEL	RUBEN	KETCHIKAN	AK	
356	PITCHER	GERALD	THORNE BAY	AK	
570	PITTMAN	JOHN	KETCHIKAN	AK	
702	PLUID	CHARLES	WARD COVE	AK	
749	POLLARD	FLOYD	KETCHIKAN	AK	
317	POOL	CHARLES	KETCHIKAN	AK	
282	PORTER	DIANA	CRAIG	AK	
252	PORTER	RANDALL	CRAIG	AK	
602	PORTMAN	CARL	ANCHORAGE	AK	
197	POTTER	LEON	JUNEAU	AK	
223	POUTT	MIKE	KETCHIKAN	AK	
136	PRATHER	MARVIN	KETCHIKAN	AK	
641	PREFONTAINE	EILEEN	SITKA	AK	HI DRIVE DRILLING/BLASTING
635	PRENTICE	ARLENE	JUNEAU	AK	
478	PRENTICE	BRUCE	KETCHIKAN	AK	
636	PRENTICE	BRUCE	JUNEAU	AK	
143	PRESTON	ERIN	KETCHIKAN	AK	
405	PREUSSER	ROBIN	KETCHIKAN	AK	
407	PREUSSER	RONALD	KETCHIKAN	AK	
249	PRICE	DORA	KETCHIKAN	AK	
250	PRICE	KIRK	KETCHIKAN	AK	
198	PRICE	RAYMOND	WARD COVE	AK	
432	PURVIANCE	JERRY	SEQUIM	WA	
768	PYLES	TERRY	KETCHIKAN	AK	KTN FISH/GAME ADVIS. COM.
285	QUICK	ELAINE	KETCHIKAN	AK	
191	QUICK	RONALD	KETCHIKAN	AK	
715	RABER	CURT	BAIH ISLAND	WA	
774	RABUNG	SAMUEL	NEETS BAY	AK	SSRAA
779	RABUNG	WENDY	NEETS BAY	AK	
437	RADERGRAHAM	CORRINE	KETCHIKAN	AK	
385	RAITMEN	JOHN	KETCHIKAN	AK	
264	RAMBOSEL	HENRY	KETCHIKAN	AK	
434	RATKIE	VICTOR	SHELTON	WA	
774	REBUNG	SAMUEL	NEETS BAY	AK	
342	REECE	JAMES	METLAKATLA	AK	
20	REECE	WILLIAM	METLAKATLA	AK	
875	REED	RICHARD	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
644	REESER	ROBIN	WARD COVE	AK	
629	REIME	HANS	WARD COVE	AK	
184	RENDA	BETH	KETCHIKAN	AK	
409	RENO	LESLIE	WARD COVE	AK	
324	RENO	MARILYN	WARD COVE	AK	
t09	RHINE	DONALD	KETCHIKAN	AK	
299	RHINE	JEAN	KETCHIKAN	AK	
333	RICE	MICHAEL	KETCHIKAN	AK	
582	RIFFE	JOHN	CRAIG	AK	
586	RIFFE	JULIE	KETCHIKAN	AK	
245	RIFFE	TRACY	KETCHIKAN	AK	
135	RILEY	ROBERT	NINILCHIK	AK	
613	RITTER	EARL	BAKER CITY	OR	
178	ROBB	RICHARD	KETCHIKAN	AK	
106	ROBBINS	HAROLD	YAKUTAT	AK	
423	ROBBINS	TONI	KODIAK	AK	
329	ROBINSON	GARY	KETCHIKAN	AK	
274	RODRIGUEZ	MICHAEL	KETCHIKAN	AK	
871	RODY	MICHAEL	KETCHIKAN	AK	
650	ROLSON	ALVIN	WRANGELL	AK	
309	ROMINE	BRUCE	WARD COVE	AK	
746	ROPPEL	FRANKLIN	SITKA	AK	
783	ROPPEL	FRANKLIN	SITKA	AK	
653	ROSSING	RON	WARD COVE	AK	
416	RULE	JOSEPH	LYNNWOOD	WA	
279	RUSSELL	INA	KETCHIKAN	AK	
662	RUSSELL	JAMES	JUNEAU	AK	
824	RUSSELL	JOHN	ANCHORAGE	AK	
623	SALISBURY	ALAINA	KETCHIKAN	AK	
850	SALLEE	MIKE	KETCHIKAN	AK	
203	SALTSMAN	JACK	KETCHIKAN	AK	
591	SANCHEZ	GERARDO	JUNEAU	AK	
668	SANDERS	DIXIE	LYONS	OR	
271	SARBER	MYRA	KETCHIKAN	AK	
276	SATHOFF	KIRK	WARD COVE	AK	
171	SCHENCK	SANDRA	KETCHIKAN	AK	
817	SCHMIDT	DAVID	SNOQUAMISH	WA	
539	SCHMIDT	TONIA	SILVERDALE	WA	
536	SCHNABEL	JOHN	HAINES	AK	
125	SCHWADER	DAVE	KETCHIKAN	AK	
812	SEALE	JOE	THORNE BAY	AK	
268	SEBERA	WILLIAM	WARD COVE	AK	
660	SELLARDS	DELL	HYDABURG	AK	
259	SELLARDS	DON	KETCHIKAN	AK	
729	SERRILL	WARD	KETCHIKAN	AK	
790	SHAFFER	MICHAEL	KETCHIKAN	AK	
594	SHAFFER	STEPHEN	SITKA	AK	
419	SHARB	THYES	JUNEAU	AK	
228	SHATTUCK	ROGER	KETCHIKAN	AK	
424	SHAUB	RUSSELL	JUNEAU	AK	
270	SHAYEN	ARTHUR	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
515	SHAYEN	GEORGE	KETCHIKAN	AK	
366	SHELLY	HARVEY	KLAWOCK	AK	
154	SHEPARD	BRUCE	HOONAH	AK	AK LOGGERS ASSOCIATION
538	SHERMAN	PATRICK	CORDOVA	AK	
608	SHRIVER	DOUG	WARD COVE	AK	
231	SHULL	STEVE	WARD COVE	AK	
122	SILVERWOOD	JIM	SHELTON	WA	
327	SIMMONS	CHARLES	KETCHIKAN	AK	
151	SIMMS	LORRAINE	KETCHIKAN	AK	
832	SIMPSON	LARRY	KETCHIKAN	AK	
248	SIMS	JACK	THORNE BAY	AK	
273	SIMS	KAY	KETCHIKAN	AK	BEST WESTERN LANDING
225	SINGER	WILLIAM	KETCHIKAN	AK	
96	SIXBEY	PETER	METLAKATLA	AK	
639	SKIBO	PHILLIP	CRYSTAL FALL	MI	
466	SMITH	BRIAN	WRANGELL	AK	
730	SMITH	CLARENCE	WARD COVE	AK	
580	SMITH	FRED	WARD COVE	AK	
633	SMITH	KEITH	KETCHIKAN	AK	
74	SMITH	MIKE	WARD COVE	AK	
590	SMITH	RICHARD	JUNEAU	AK	
304	SMITH	ROBERT	KETCHIKAN	AK	
77	SNELLING	ALBERT	SITKA	AK	
6	SODERBERG	GARY	KETCHIKAN	AK	
41	SODERBERG	VIRGIL	ANCHORAGE	AK	
269	SONGSTER	WILBUR	KETCHIKAN	AK	
108	SOUKUP	DONALD	SITKA	AK	
698	SOWLE	ROBERT	KETCHIKAN	AK	
415	SPOELSTRA	RITA	KETCHIKAN	AK	
499	SPORTSMAN	JAN	WARD COVE	AK	
510	SPORTSMAN	TAWNY	WARD COVE	AK	
690	SPURGEON	DENNIS	KETCHIKAN	AK	
371	STAFFORD	LADONNA	KODIAK	AK	
819	STAFFORD	PEGGY	SWEET HOME	OR	
KS3	STALLINGS	CAROLINE	KETCHIKAN	AK	
KS5	STALLINGS	SHELLY	KETCHIKAN	AK	
866	STANTON	ALAIRE	KETCHIKAN	AK	MAYOR, CITY OF KTN
719	STANTON	EUGENE	KALISPELL	MT	
97	STARRISH	HENRY	METLAKATLA	AK	
116	STARRISH	VICTOR	METLAKATLA	AK	
632	STASKA	RUSS	KETCHIKAN	AK	
7	STECKLEIN	JOSEPH	KETCHIKAN	AK	
168	STECKLEIN	NANINE	KETCHIKAN	AK	
5	STEIN	W.G.	KETCHIKAN	AK	
818	STEMERSON	DONALD	SALMON	ID	
382	STEPHENS	TREVOR	KETCHIKAN	AK	
451	STEVENSON	MONICA	AUKE BAY	AK	
325	STEWARD	KELLY	KETCHIKAN	AK	
440	STEWART	BUD	HOONAH	AK	
176	STIDD	JERRY	KETCHIKAN	AK	
232	STOCKTON	DAVID	KLAWOCK	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
181	STONER	ROBERT	KETCHIKAN	AK	
771	STRASBURGER	STEPHEN	JUNEAU	AK	
84	STRATTON	DARRELL	KETCHIKAN	AK	
69	STREDWICK	ROBERT	HOONAH	AK	
537	STRONG	GENE	HAINES	AK	
569	STURGEON	JOHN	ANCHORAGE	AK	KONCOR FOREST PROD.
659	SULLIVAN	DENNIS	KETCHIKAN	AK	
750	SWARTZ	STAN	KETCHIKAN	AK	
403	SYFERT	STEVE	GRANTS PASS	OR	
82	TAMINO	ROY	KETCHIKAN	AK	
782	TARO	CLIFF	KETCHIKAN	AK	
655	TARO	JIM	KETCHIKAN	AK	
117	TARO	NAOMI	KETCHIKAN	AK	
737	TAYLOR	ARRON	KETCHIKAN	AK	
814	TAYLOR	CHRISTINE	CRAIG	AK	
572	TAYLOR	EUGENE	KETCHIKAN	AK	
740	TAYLOR	LLOYD	KETCHIKAN	AK	
711	TAYLOR	RICHARD	KETCHIKAN	AK	
865	TAYLOR	ROBIN	KETCHIKAN	AK	
494	TEMANSON	CRAIG	HOONAH	AK	
553	TENNEY	CARL	WARD COVE	AK	
516	TENNEY	GARTH	WARD COVE	AK	
152	THOMAS	CRAIG	KETCHIKAN	AK	
339	THOMAS	LARRY	KETCHIKAN	AK	
558	THOMPSON	AMY	KETCHIKAN	AK	
687	THOMPSON	BRIAN	THORNE BAY	AK	
254	THOMPSON	DAVID	WARD COVE	AK	
25	THORNLOW	DON	KETCHIKAN	AK	
648	THRALL	SHARON	KETCHIKAN	AK	
166	TIEMERSMA	LEN	KETCHIKAN	AK	
150	TINKISS	DARYL	KETCHIKAN	AK	
251	TIPTON	JIM	KETCHIKAN	AK	
40	TOFLAND	MARGARET	JUNEAU	AK	
156	TONSGARD	WILLIAM	JUNEAU	AK	
265	TOPPING	EUGENE	WARD COVE	AK	
195	TOUMEY	KILEY	CUBE COVE	AK	
542	TRASH	DENNIS	SWEET HOME	OR	
337	TROSAW	RICHARD	CRAIG	AK	
695	TROUT	TOM	KETCHIKAN	AK	
468	TURNER	BRIAN	WARD COVE	AK	
393	TURNER	JEFF	KETCHIKAN	AK	
201	TWITCHELL	KENNETH	COVEMAN COVE	AK	
628	TWITCHELL	THOMAS	THORNE BAY	AK	
547	TYLER	H.B.	METLAKATLA	AK	
441	TYLER	SUSAN	HOONAH	AK	
359	URQUIST	GLEN	SITKA	AK	
368	VALENTIC	VICKIE	KETCHIKAN	AK	
766	VALENTIC	WAYNE	KETCHIKAN	AK	
47	VANTREASE	GLENN	JUNEAU	AK	
289	VANWORMER	PAUL	KETCHIKAN	AK	
863	VEIT	KATHY	SEATTLE	WA	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
400	VINCENT	BRENDA	KETCHIKAN	AK	
148	VINCENT	DOUGLAS	KETCHIKAN	AK	
320	VISITACION	ROLANDO	KETCHIKAN	AK	
173	WAGGONER	MARILEE	WARD COVE	AK	
552	WAHL	JAMES	PORTLAND	OR	
258	WALKER	JOHNATHAN	WARD COVE	AK	
595	WALKER	ROCKY	SITKA	AK	
57	WALLACE	MARGARET	KETCHIKAN	AK	
545	WALLACE	SALLY	SITKA	AK	
411	WALLACE	VICKI	KETCHIKAN	AK	
131	WALLACE	WILLIAM	KETCHIKAN	AK	
235	WALTERS	KEVIN	CRAIG	AK	
199	WALTERS	PAUL	KETCHIKAN	AK	
162	WALTERS	SUSAN	KETCHIKAN	AK	
373	WANAMAKER	C.R.	JUNEAU	AK	
130	WARNER	JEFF	JUNEAU	AK	
520	WARNER	RICH	GREELY	CO	
104	WATSON	BONNIE	JUNEAU	AK	
246	WATSON	CARRIE	KETCHIKAN	AK	
71	WATSON	CHUCK	JUNEAU	AK	
606	WATT	BOB	KETCHIKAN	AK	
467	WATT	DEREK	KETCHIKAN	AK	
378	WATT	NANCY	KETCHIKAN	AK	GREATER KTN C OF C
868	WATT	NANCY	KETCHIKAN	AK	
469	WEHRMAN	JOSEPH	ANCHORAGE	AK	KONCOR FOREST PROD.
142	WEIHEMULLER	LOREN	KETCHIKAN	AK	
134	WEISGRAM	KENNETH	KETCHIKAN	AK	
215	WETHERBEE	FRANK	COFFMAN COVE	AK	
588	WHELCHEL	ARTHUR	KETCHIKAN	AK	
587	WHELCHEL	KATHERINE	KETCHIKAN	AK	
200	WHITE	CHARLES	KETCHIKAN	AK	
364	WHITE	DAVID	KETCHIKAN	AK	
163	WHITLEY	S.N.	KETCHIKAN	AK	
769	WIELER	DAVID	KETCHIKAN	AK	B&D LAB
513	WILKE	EDWARD	WARD COVE	AK	
300	WILKE	FRANK	KETCHIKAN	AK	
98	WILLIAMS	CURTIS	METLAKATLA	AK	
344	WILLIAMS	DONNELLY	METLAKATLA	AK	
SS5	WILLIAMS	JOE	SAXMAN	AK	
568	WILLIAMS	TENA	KETCHIKAN	AK	
46	WILLIAMS	VIRGIL	METLAKATLA	AK	
869	WILLIAMS	WILLIAM	JUNEAU	AK	AK STATE LEGISLATURE
209	WILLIS	JOHN	YAKUTAT	AK	
238	WINSENBERG	CARL	CRAIG	AK	
338	WINSENBERG	VIRGINIA	CRAIG	AK	
512	WINTER	ANDREA	WARD COVE	AK	SIX ROBBLEES', INC.
313	WINTER	GEVAN	KETCHIKAN	AK	
313	WINTER	GEVAN	KETCHIKAN	AK	
101	WINTER	ROY	METLAKATLA	AK	
208	WINTER	TOM	SEATTLE	WA	
35	WINTERMUTE	WILL	KETCHIKAN	AK	

CODE	LAST	FIRST	CITY	STATE	ORGANIZATION
305	WOLFE	DENNIS	WARD COVE	AK	
706	WOLFE	RONALD	JUNEAU	AK	
579	WOOD	DAN	ANCHOR POINT	AK	
585	WOOLLEY	DAN	WRANGELL	AK	
110	WOOTON	ROBERT	KAKE	AK	
147	WORKMAN	DALE	KETCHIKAN	AK	
744	WRIGHT	BRENDA	JUNEAU	AK	USDA, FS PNW RES. STA
678	WULF	LYLE	SITKA	AK	
27	YLINIEMI	MICHAEL	METLAKATLA	AK	
442	YLINIEMI	RONNIE	METLAKATLA	AK	
397	YODER	LYLE	KETCHIKAN	AK	
384	YOUNG	MARLA	KETCHIKAN	AK	
112	ZADINA	LAURI	KETCHIKAN	AK	
734	ZELLMER	PAUL	KETCHIKAN	AK	
858	ZIESAK	RODGER	KETCHIKAN	AK	
375	ZIMMERMAN	JOSEPH	ANCHORAGE	AK	
422	ZIOLKOWSKI	TOM	ANCHORAGE	AK	
120	ZUMSTEIN	JOEL	WOODLAND	WA	
257	ZWICK	DAVID	KETCHIKAN	AK	
51	ZWIERS	DARREL	KETCHIKAN	AK	

RESPONSE TO PUBLIC COMMENTS

Introduction

The USDA Forest Service, Tongass National Forest, Ketchikan Area, received a total of 877 written and oral comments on the Ketchikan Pulp Company Long-term Timber Sale Contract, North Revilla Draft Environmental Impact Statement. Responses from the community Subsistence Hearings (18 individuals) were given a letter-number code corresponding to the community where the hearing was held and the order in which the speaker was heard. The Interdisciplinary Team thoroughly and objectively read and analyzed every written response and subsistence testimony and categorized each expressed issue or concern. These identified issues were then sub-divided or grouped as appropriate to facilitate response. Due to the exceptionally voluminous comments received, the comments have been summarized, rather than included in their entirety, in compliance with 40 CFR 1503.4(5)(b). Copies of all letters and a certified transcript of subsistence testimonies are included in the North Revilla Planning Record.

Use of public comments is not a vote counting process; all comments were carefully considered in the preparation of the Final EIS. All issues and document-specific comments are responded to in this appendix. Alternatives have been modified based on the issues and concerns derived from the public comments; and additional discussion and expanded analyses has been done in the Final EIS to address public concerns.

The format for discussing the Forest Service Response to Public comments in this appendix is as follows:

1. Statement of the main issue or comment, with a brief summary of the range of comments;
2. Statement of relevant sub-issue or sub-topic;
3. List of organizations or individuals who addressed the issue by code number;
4. Examples of specific statements from the written responses or subsistence hearings that reflect the full range of public input on the issue;
5. Forest Service Response.

The Forest Service response provides an overview of Forest Service policy or direction regarding the issue, discusses how the issue has been addressed, and directs the reader to the appropriate section of the FEIS of a more complete discussion. Issues 1-16, 20 and 23 of this appendix are also discussed in Chapter 1.

Issue 1: Cost Effectiveness of Timber Harvest Operations

Issue 1A: Economical harvest for KPC

Letters and Comments on this Subject Include:

001-090, 092-211, 214-233, 236-257, 259-291, 293-338, 341-394, 396-409, 412-514, 516-523, 525-548, 550-563, 565-647, 649-713, 715, 716, 718-721, 723, 725, 731, 743, 745-749, 750, 753, 756, 761, 762, 766, 768, 771, 773, 775, 783, 785-826, 829-832, 851, 852, 858, 861, 865, 868, KS6, SS1, SS2, SS3

Examples Included:

I feel strongly that the Forest Service needs to continue to meet the contractual terms of the Long Term Sale agreement with Ketchikan Pulp Company and the Forest Service needs to come up with a more economically feasible logging plan while minimizing adverse environmental impacts and protecting multiple use values. #747

I believe that the USFS has an obligation to provide timber sales that are developed as economically as possible to reduce costs and increase stumpage revenues. #851

... wherever possible, modifications should be made to reduce costs and thereby increase stumpage receipts to the Federal and State governments. #001-090, 092-211, 214-233, 236-257, 259-291, 293-338, 341-394, 396-409, 412-514, 516-523, 525-548, 550-563, 565-647, 649-713,715, 716, 718-721, 723, 771, 773, 775, 783, 785-826, 829-832, 852, 858, 861, 865, 868.

Forest Service Response:

Forest Service direction is to conduct a "Midmarket Assessment" to establish the economics of proposed timber sale offerings. It is used to determine whether or not the "average operator" will or will not make a profit. At the time of the analysis, modifications can be and are implemented to enhance the economics of an individual alternative. The Midmarket Assessment for the North Revilla project alternatives was performed as directed in R-10 Supplement No. 2409.18-91-1 of the FSH 2409.18—Sale Preparation Handbook. This R-10 Supplement requires that factors used in calculating the estimated timber values must be based on those Regional average timber values and logging costs which were in effect the date the Notice of Intent for the project was issued on June 20, 1991. The R-10 Supplement also requires that 60 percent of normal profit and risk must be used in the midmarket assessment as this is the minimum margin for profit and risk required for the sale to be considered an economical offering. See the Social-Economics section of Chapter 3. Final contract stumpage rates will be determined by appraisal of each offering area using the most current values and costs available at that time.

Alternative 3 was specifically designed to maximize sale economics in part through eliminating costly helicopter yarding. All other alternatives were designed to meet specific objectives while minimizing overall costs. Also see response to Issue 1B, 1F and 6K/2.

Issue 1B: Helicopter logging should be limited to that which is economically feasible and where conventional cable yarding systems will not work.

Letters and Comments on this Subject Include:

001-041, 043-058, 060-076, 078-082, 084-088, 090, 092-095, 097-113, 114-121, 123-138, 141-157, 159-168, 170-172, 174-211, 214-221, 223-233, 236-257, 259-291, 293-338, 341-387, 389-394, 396-409, 412-419, 421-429, 431-443, 445-489, 491-514, 516-523, 525-548, 550-563, 565-633, 635-647, 649, 651-666, 668-679, 681-713, 716, 718-721, 723, 725, 743, 745, 747, 748, 751, 753, 765, 766, 771, 773, 775, 785, 787-790, 792-807, 809-812, 814-826, 829, 830, 832, 852, 861, SS1.

Examples Included:

Deficit and below cost timber sales are a major concern. Helicopter logging should be limited to 1) only that amount that will not drive any particular offering of harvest units into a deficit or below cost situation, and 2) only areas that cannot be logged appropriately with less costly conventional systems. #001-041, 043-058, 060-076, 078-082, 084-088, 090, 092-095, 097-113, 114-121, 123-138, 141-157, 159-168, 170-172, 174-211, 214-221, 223-233, 236-257, 259-291, 293-338, 341-387, 389-394, 396-409, 412-419, 421-429, 431-443, 445-489, 491-514, 516-523, 525-548, 550-563, 565-633, 635-647, 649, 651-666, 668-679, 681-713, 716, 718-721, 723, 771, 787-790, 792-807, 809-812, 814-826, 829, 830, 832,

Having participated in helicopter logging, I perceive it as an ideal surgical tool for removal of high quality resource in sensitive areas, and areas which are not of sufficient size (volume) to warrant roadbuilding activity. #775

Forest Service Response:

During the Multi-Entry Layout Plan (MELP) process for North Revilla, harvest units were planned within all the normal, difficult, and isolated components of potential timber harvest areas, as scheduled by the Forest Plan (TLMP 1979, as amended). The MELP for the North Revilla Project was specifically designed to utilize the least expensive yarding system that will meet all Forest Plan standards and guidelines, for both safety and resource protection. Helicopter yarding systems were recommended in two general situations: (1) it did not appear feasible to construct access roads to cable log the unit, or (2) while road access was technically feasible, the anticipated effects of road construction and cable-based logging, in combination with economic factors, did not meet project objectives, BMP's or Standards and Guidelines. The FEIS presents an alternative (Alternative #3) in which no helicopter yarding is proposed, and discloses the effects of helicopter logging in other alternatives. See Chapter 3, Silviculture and Timber, Potential Unit Pool and Logging Systems.

Issue 1C: Construction costs are excessive (roads, bridges & LTF's.

Letters and Comments on this Subject Include:

1-15, 17-41, 43-49, 51-72, 74-76, 78-90, 92-95, 97-157, 159-211, 214-219, 221-233, 237-286, 288, 290, 291, 293-338, 341-394, 396-409, 412-429, 432-434, 436-471, 473-523, 525-548, 550-563, 565-708, 710-713, 715, 716, 718-721, 723, 725, 731, 743, 745, 747-749, 751, 753, 765, 771, 775, 787-811, 814-826, 829, 830, 832, 851, 852, 856, 858, 859, 868

Examples Included:

Excessive construction requirements have driven up costs and caused a loss of stumpage receipts to the Federal and State governments. Constraints that cause this situation should be minimized. 1-15, 17-41, 43-49, 51-72, 74-76, 78-90, 92-95, 97-157, 159-211, 214-219, 221-233, 237-286, 288, 290, 291, 293-338, 341-394, 396-409, 412-429, 432-434, 436-471, 473-523, 525-548, 550-563, 565-708, 710-713, 715, 716, 718-721, 723, 771, 787-811, 814-826, 829, 830, 832, 852

The cost of timber sale development could be drastically reduced if many of the "archaic" standards used were reduced or eliminated and a "private sector" approach were taken toward the maximizing of revenues on the part of the USFS. #851

Constructing spur roads to minimal acceptable standards for timber harvest would increase the net revenue per mbf of timber harvested. #856

Forest Service Response:

The Forest Service plans road systems to provide for long term access, at the least cost, taking into consideration resource protection and public safety. The number of LTF's, total road miles and the amount of full bench road construction all heavily influence overall construction costs. Each has been minimized to the extent practicable. The FEIS has eliminated two LTF's in Traitors Cove after field verification of the road connection to SW Neets Bay LTF and determination that the economic tradeoff was beneficial or neutral. Forest Service Handbook 2509.22, Soil and Water Conservation, (BMP 14.7) states, "when topographic and drainage conditions allow, design Forest roads with a balanced cut/fill to reduce the amount of excavation and size of fills, except on areas requiring end haul for stability reasons. Under special circumstances, full-bench cuts with end haul may be required." Proposed North Revilla road locations were designed to minimize full bench construction to the extent practicable. The actual determination of whether full-bench/endhaul or other expensive road contruction techniques are essential is made during project implementation and not during NEPA. After road locations are established and reviewed, the route is surveyed, and the survey data is used to design the road for contruction. During the design phase, decisions on what construction techniques are necessary to meet all requirements, is made on a case-by-case basis. Factors influencing whether or not full bench construction is to be utilized are: ground slope, proximity to streams, soil type, and applicable BMP's.

Issue 1D: Helicopter logging costs estimates are too low.

Letters and Comments on this Subject Include:

567, 852, 856, 858, 859, 861, SS1

Examples Included:

Regional helicopter costs need to be updated to reflect a more accurate representation of the costs associated with helicopter yarding. These costs are necessary to compare the economic difference between alternatives which have helicopter yarding and alternatives which do not have helicopter yarding. #856

Helicopter yarding costs have been incorrectly calculated. A new method has been developed and should be used for this project. #858

Your economic analysis is substantially flawed in some cases bacause the helicopter logging cost is severely understated. #859

Forest Service Response:

The Forest Service recently updated its helicopter logging costs to better reflect experienced costs in Region-10. The updated information has been incorporated into the FEIS mid-market analysis (see Chapter 3, Timber).

Issue 1E: Alternatives to clearcutting.

Letters and Comments on this Subject Include:

043, 728, 768, 770, 780, 876

Examples Included:

As a long time resident of Alaska and as a sportsman who needs to hunt and fish to feed his family I urge you to end this wasteful way of logging (clearcuts) and stop raping Alaska so the mill can stay open to ship its products to Japan and other foreign markets. #728

Clearcutting and making a patchwork of the forest is not condusive to this kind of industry (tourism). #770

Forest Service Response:

The selection of clearcutting as the primary method of timber harvest for North Revilla Project Area was evaluated and is consistent with the Chief of the Forest Service's direction to reduce the amount of clearcutting on National Forest lands (June 4, 1992 letter to Regional Foresters and Station Directors). For a discussion of how NRPA addresses the 7 points contained in the Chief's letter, see the Timber and Vegetation section of Chapter 3. Clearcutting remains the most widely used method of timber harvest for this project and is based on recommendations developed by a certified silviculturist to ensure adequate regeneration and stocking levels. Other silvicultural treatments included in the FEIS include shelterwood harvest to enhance regeneration of Alaska yellow cedar, and wildlife islands to promote structural within-stand diversity. The Forest Service Preferred Alternative has 6,346 acres proposed to be harvested by clearcutting and 222 acres to be harvested by other silvicultural systems.

Issue 1F: Don't subsidize KPC.

Letters and Comments on this Subject Include:

091, 862B

Examples Included:

We are enclosing a copy of the article by Jeffrey St. Clair entitled "Big Paychecks on the Tongass", Forest Watch (October 1992). This article is submitted because of our concern (p.3 of SEACC's CPOW DEIS comments) about the Forest Service's failure to disclose the million of dollars paid

directly to KPC this past year and how these payments, as well as the granting of KPC's emergency rate determination request, affect the Forest Service's determination that this sale is necessary to meet actual market demand. #862B

Forest Service Response:

It is Forest Service policy to offer all timber purchasers an economically viable timber sale. During the NEPA analysis for a proposed timber sale in Region 10, the Forest Service performs a mid-market assessment of timber economic conditions present at the time of the Notice of Intent (June 20, 1991). The results of the mid-market assessment for NRPA shows that alternatives 3 and 6 have a positive net stumpage, which indicates timber sales arising from these alternatives will be operated under a positive market condition most of the time. Alternatives 2, 4 and 5 have a negative mid-market value, which would indicate that on the average they would yield only base rates. Base rates are the minimum amount that the Forest Service will accept for stumpage, regardless of how deficit the sale appraises.

Individual timber offerings arising from NRPA will be cruised and appraised to estimate applicable timber values and associated logging and processing costs, using site specific timber conditions and up-to-date costs and values. In addition, indicated stumpage values will be adjusted to develop rates which more fully reflect higher stumpage costs associated with the competitive bidding process in independent timber sales. This process is fully intended to make the stumpage rates assessed KPC more fully approximate rates charged to independent processors.

The Forest Service disagrees that KPC is being subsidized and that the timber sale program on the Tongass Forest is 'below cost.' The Social and Economic section of Chapter 3 displays the three most recent years of TSPIRS reports, which have been agreed upon by Congress, GAO, and the USFS to provide the best basis for evaluating timber sale profitability. These reports, when viewed from the perspective of before payments to the State of Alaska, indicate a positive program in two of the last three years.

On November 28, 1990, the Tongass Timber Reform Act became law. This timber offering has been prepared in conformance with that Act. Any examination beyond that which is required for the project analysis is extraneous to the NEPA process and beyond the scope of this analysis. See *Timber Supply and Demand in Southeast Alaska, FY 1991* for timber demand analysis.

Issue 1G: Yarding units with leave islands/ snag patches is less efficient-cost factors should be added.

Letters and Comments on this Subject Include:

766, 858

Examples Included:

Also yarding in units with oldgrowth leave islands and/or snag patches is less efficient then standard clearcutting. the FS should develop a factor to address this added cost. #858

Forest Service Response:

All forms of partial cuts, including wildlife islands, snag patches, shelterwoods, will be designed through silvicultural prescriptions and logging system feasibility, which includes safety

considerations. Although these silvicultural systems may increase logging costs, they do provide benefits to other resources. These adaptations are implemented to meet Forest Plan Standards and Guidelines as well as to address valid concerns for other resources. The timber appraisal process will address differences in logging costs between harvest methodologies. Cost centers within the appraisal, such as number of logs per MBF, can be adjusted to reflect increased costs for partial cuts.

Issue 1H: Proportionality/Inaccurate TIMTYP maps.

Letters and Comments on this Subject Include:

771, 774, 777, 853, 859, 875, KS3

Examples Included:

The TTRA directs the FS to avoid laying-out timber sales which result in a disproportionate amount of harvest in the highest volume classes. Unfortunately, there are recognized inaccuracies concerning the timber inventory and the timber-type database being used to monitor compliance with proportionality rules. #875

The North Revilla plan is not in compliance with the proportionality provisions of Section 301(c)(2) of TTRA because there is no site specific information and ground truthing of the location of volume classes. Since it has been shown that timber type maps used in place of ground truthing are over 50 percent inaccurate, the agency cannot rely on them to assess whether the timber plan is in compliance with the proportionality provisions of TTRA. TCS request that the Forest Service conduct a significant number of on-ground timber cruises so that proportionality can be assessed in a meaningful way. #853

Forest Service Response:

The Timber section of Chapter 3 quotes Section 301(c)(2) of the Tongass Timber Reform Act (TTRA) which provides the legal requirement for proportionality. This law was to be implemented February 28, 1991 (90 days from the date of passage of the TTRA). It was determined that the proportionality base was to be calculated at a snapshot in time, using the TIMTYP (timber type) map in the Forest Service Geographic Information System (GIS), as of November 28, 1990. TIMTYP is the timber resource base used by the TLMP as amended (1979) that displays, among other things, the inventoried volume class distribution of the Forest. This was the best available information and was used to calculate the proportionality base for each Management Area.

Direction contained in Forest Service Handbook 2409.18, Region 10 Supplement No. 2409.18-92-5 was followed in the EIS projection of this project's compliance with the TTRA proportionality requirement. The proportionality for Management Area K32 is 8.82. *While the R-10 Supplement requires that each proposed alternative meet proportionality requirements,* **the final determination of proportionality is based upon the harvested, as opposed to the planned, configurations of the units.**

The basis for proportionality analysis is the TIMTYP map in the Forest Service Geographic Information System (GIS). TIMTYP is the timber resource base used by the TLMP that displays, among other things, the inventoried volume class distribution of the Forest. The Forest Service has determined that this data base represents the best information available. Each of the project's action alternatives was determined to meet the proportionality requirement of the TTRA.

Issue 1I: Don't export unprocessed timber (round logs.)

Letters and Comments on this Subject Include:

096, 137, 346, 535, 608, 686-690, 709, 728, 749, 850, KS2, SS4

Examples Included:

...stop raping Alaska so the mill can stay open to ship its products to Japan and other foreign markets. #728

P.S. I believe that we should keep the wood in the state as well as other things. #749

Forest Service Response:

Resolution of this issue is beyond the scope of this EIS, but it is discussed here to respond to public comment. Section B0.15 of the KPC Long-term Contract requires that the primary manufacture of timber harvested from National Forest lands be performed in Alaska, except for cedar, which may be exported as unprocessed logs under certain conditions. The Regional Forester authorizes export of western red cedar and Alaska yellow cedar, subject to periodic review. Currently, the facilities for complete processing of these wood products within Alaska are limited. If local processing capability is increased, the Regional Forester's decision on cedar export may be reconsidered. Even though cedar is currently allowed to be exported, there is nothing stopping local processing.

Issue 1J: Volume per acre estimates are too high.

Letters and Comments on this Subject Include:

858, 766

Examples Included:

The estimated Average Volume Per Acre seems high. #858

Your volume estimates for all alternatives seem to be high to me. Do not be surprised if the area does not cut out to the anticipated volume. Plans should be made for that contingency. #766

Forest Service Response:

Timber volumes for each individual unit proposed for harvest were calculated by first breaking the area into individual volume class strata according to the Forest TIMTYP map and then multiplying volume-per-acre values times each volume class strata. These volume-per-acre figures are based upon silvicultural stand exam data, as discussed in Chapter 3, Timber and Vegetation, and was consequently relevant for the intended purpose of alternative analysis. Volume-per-acre figures for the actual offerings will be based on cruise data developed during sale layout.

Issue 1K: Opportunities for shovel logging were not identified.

Letters and Comments on this Subject Include:

001-090, 092-211, 214-233, 236-257, 259-291, 293-338, 341-394, 396-409, 412-514, 516-523, 525-548, 550-563, 565-647, 649-713, 715, 716, 718-721, 723, 771, 773, 775, 783, 785-826, 829-832, 858

Examples Included:

...although, whenever possible, modifications should be made to reduce costs and thereby increase stumpage receipts to the Federal and State governments. #001-090, 092-211, 214-233, 236-257, 259-291, 293-338, 341-394, 396-409, 412-514, 516-523, 525-548, 550-563, 565-647, 649-713, 715, 716, 718-721, 723, 771, 773, 775, 783, 785-826, 829-832

Where soil conditions permit, the BMP should be changed to allow shovel logging on slopes in excess of 20%. #858

Forest Service Response:

The DEIS displayed the acres suitable for shovel yarding (page 3-175). This analysis has been expanded for the FEIS by displaying specific shovel yarding acreages on the unit cards. These areas were identified during office review and field reconnaissance, and evaluated by a soils scientist to determine which areas fully met Regional Guidelines for shovel logging (Forest Service Handbook 2509.22, Soil and Water Conservation Handbook, BMP 13.7). The Handbook states, "...slopes up to 20% may be suitable for shovel yarding. On steeper slopes, an IDT should be consulted." The areas which were determined to be suitable were costed for shovel yarding in the mid-market analysis in Chapter 3, Timber and Vegetation.

Issue 1L: Second-growth management inadequately addressed.

Letters and Comments on this Subject Include:

011, 041, 193, 592, 593, 598, 681, 707, 853, 858

Examples Included:

Timber is a renewable resource and should be managed as such. #592

Try to reforest Doug. Fir (Douglas fir); import it from WA with a 1,000 ft. altitude seedling differential for cooler climate. #681

If they (KPC) close down, what then? Would the Forest Service have sacrificed all of its best saw timber, usable and in demand for furniture and many specialty uses requiring knot free water resistant wood, for pulp that will no longer be needed. #734

Given the magnitude of past logging in the valley bottoms, how much LOD is available in the second growth stands to replace the current stream LOD needed for the next 200 to 250 years until the riparian area is once again old growth stands? How will the Forest Service mitigate for this "diminished bank" or reserve of LOD? #853

Forest Service Response:

The Alaska Region has developed a Silviculture Inventory System (SIS) to aid in tracking and planning of second growth management priorities and prescriptions. These future opportunities were identified in Chapter 3, Appendix H and I of the DEIS and the FEIS. Potential second-growth management opportunities to benefit other resource values have been identified in Chapter 3 of the FEIS (see Chapter 3 Fisheries and Wildlife sections).

Old-growth harvesting will continue to be the primary source of timber for the coming 50–75 years. Though old-growth harvest will decline over time, some old-growth harvest is anticipated over the entire planning horizon (150 years). Premium grades of timber are, and will continue to be available through primary (independent timber sales) and secondary markets. The supply of premium grades will decline over time, as faster growing/shorter rotation second growth provides higher yields but lower overall quality.

The Forest Service has conducted research tests on a variety of species, including Douglas fir (*Pseudotsuga menziesii*) to potentially increase timber yields/quality. There are a number of problems with type conversions, especially where non-local species are concerned. Douglas fir can do well as an ornamental in SE Alaska but in general is poorly adapted for typical forest growing conditions. In particular, the root systems require well-aerated soils. Soils that are fully saturated or poorly drained tend to limit the trees survival. Almost all soils in SE Alaska are fully saturated at times during the year due to the high amount of precipitation typical of the area and they tend to be shallow. Only deep, well drained sites would typically support good growth of Douglas fir in SE Alaska. Unfortunately deep, well drained forest soils are very rare in SE Alaska and in the project area. See also response 1N.

Issue 1M: Units should be larger or smaller.

Letters and Comments on this Subject Include:

730, 748, 859

Examples Included:

We favor well done logging providing buffer areas around streams & following the practice of smaller clearcuts than were done in the early years. #730

Table 3-55, chapter 1 of the D.E.I.S. indicates the average unit size in the alternatives range from 35–50 acres. Average unit size in the past was about 60 acres. If this large reduction in unit size is accompanied by a large increase of road required per MMBF accessed, the Forest Service decision to reduce the average clearcut size has had a devastating impact on timber sale ecomnomics and has almost certainly condemned this project to a below-cost situation in all but the very highest markets. The Forest Service should do everything possible to increase the clearcut size in order to maximize the recovery of timber per mile of road constructed. #859

Forest Service Response:

The average unit size per alternative in the DEIS, as noted, ranged from 35 to 50 acres. The average unit size per alternative in the FEIS ranges from 34 to 48 acres. The economics of harvesting larger units was thoroughly explored during alternative development. There are many complex issues associated with the selection of settings that make up the harvest units. Meeting Forest Plan Standards and Guidelines, the needs of other resources, and working with the constraints imposed by prior harvests are all factors which limit unit size. The maximum

created opening size permitted in the Western hemlock-Sitka spruce forest type, is 100 acres [36 CFR CH11 Sec 219.27 (d) (2)], except where larger openings are permitted, or where larger units produce a more desirable combination of public benefits [36 CFR CH11 Sec 219.27 (d) (i) and (ii)]. In all alternatives there are instances where individual units are combined to create contiguous openings greater than 100 acres. (See Appendix B).

Issue 1N: Regeneration concerns in low volume stands.

Letters and Comments on this Subject Include:

780, 858, SS4

Examples Included:

Natural reseeding is not selective and in most cases too prolific for the nutrients in the soil. It is not unusual to have 20 seedling hemlocks per sq. foot. There must be some shade for regrowth of Spruce and cedar. Opening up a clearcut to full sunshine is asking for trouble. #780

And I want to know what you folks are doing about replanting trees. ....I'd like to see this done in our Forest Service. .... I haven't seen anybody, any of our reports of where they're planting trees. and this has got to be done. #SS4

Forest Service Response:

NFMA requires the Forest Service to ensure that all harvested stands are fully stocked with appropriate species within five growing seasons of harvest. Lands on which regeneration is not reasonably assured, were removed from the unit pool. Certain low volume stands, especially those having northern and eastern exposures above 1,500 feet elevation, will be challenging to regenerate naturally. Some harvest units are prescribed for shelterwood harvests to help establish regeneration on these difficult sites. All harvested areas will be monitored to determine if artificial regeneration will be necessary. (See Chapter 3, Silviculture and Timber, Silviculture, Regeneration).

Clearcutting can favor the establishment of Sitka Spruce, by destroying advance hemlock regeneration and creating seed beds that are more favorable for post-logging reproduction of spruce. Yellow cedar is also classified as an intolerant species (like western redcedar) and as such it is less shade tolerant than either hemlock or spruce. Cedar reproduction can benefit from the openings created by clearcutting, if an adequate seed source is present or artificial regeneration occurs. For a more in depth explaination, also see "Even-aged Systems" Chapter 3, Silviculture and Timber Section.

Issue 1O: Temporary road miles should be displayed.

Letters and Comments on this Subject Include:

858

Examples Included:

For each alternative to be properly evaluated the number of temporary road miles should be noted. #858

Forest Service Response:

Temporary roads were included with the local road miles and were identified in the DEIS, Table 3-156 and Table 3-157, Chapter 3, Roads and Facilities, and are also identified in the FEIS. Temporary roads in SE Alaska typically require crushed rock and may have drainage structures. The environmental effects more closely resemble specified roads than temporary roads. Specified road costs were used for temporary roads. While this may be a conservative approach economically, it more accurately reflects the environmental effects of road construction activities.

Issue 1P: Margaret Bay to Traitor's Creek/Fire Cove road connection.

Letters and Comments on this Subject Include:

001-015, 017-041, 043-049, 051-072, 074-076, 078-090, 093-188, 190-211, 214-219, 221-233, 237-257, 259-291, 293-338, 341-394, 396-429, 432-434, 436-471, 473-523, 525-548, 550-639, 641-647, 649-666, 668-678, 680-708, 710-721, 723, 725, 743, 748-750, 753, 771, 775, 782, 787-811, 814-826, 829, 830, 832, 852, 853, 856, 861, 868, 873, 875, KS4

Examples Included:

As stated in the DEIS, the "road connection is not needed to haul timber harvest units in the action alternatives" (page 3-330). The Forest Service should analyse the overall cost of this road in relation to the construction and access to a new camp facility, along with the effects of increased road density and access across important wildlife habitat. #873

We suggest you consider a Margaret Cr to Traitors Cr road connection to better utilize the Traitor's Cove LTF. #782

A road connection should be constructed between Margaret and Fire Cove-Traitor's Creek road system. This would negate the need of establishing a camp at Neets Bay. #856

Connecting the Neets Bay (Fire Cove) and Traitor's Cove road system would greatly reduce transportation and mobilization costs between these two areas. #001-015, 017-041, 043-049, 051-072, 074-076, 078-090, 093-188, 190-211, 214-219, 221-233, 237-257, 259-291, 293-338, 341-394, 396-429, 432-434, 436-471, 473-523, 525-548, 550-639, 641-647, 649-666, 668-678, 680-708, 710-721, 723, 771, 787-811, 814-826, 829, 830, 832

Forest Service Response:

See FEIS, Chapter 3, Roads and Facilities, Margaret Bay-Traitors Creek Road Construction, for an analysis of the costs of a road tie from Margaret to Traitors road systems. This data was also displayed for all alternatives in the DEIS. With logging camps and access available at either end of the road system, there is no meaningful change in access. The proposed road connection is a linear route of 1 to 2.5 miles, adding little to the road density. The economic effects of potential disturbances to the wildlife habitat in the area are not quantifiable. No alternative identifies the road connection as beneficial for timber haul.

The FEIS considers this road connection only in Alternative 2.

Issue 1Q and 1R: Virgin Bay to SW Neets road connection, North Traitors to SW Neets road connection

Letters and Comments on this Subject Include:

#001-015, 017-041, 043-049, 051-072, 074-076, 078-090, 093-188, 190-211, 214-219, 221-233, 237-257, 259-291, 293-338, 341-394, 396-429, 432-434, 436-471, 473-523, 525-548, 550-639, 641-647, 649-666, 668-678, 680-708, 710-721, 723, 725, 726, 743-745, 747-749, 751, 753, 755, 771, 775, 782, 787-811, 814-826, 829, 830, 832, 852, 853, 856, 858, 861, 868, 871, 873, 874, 875, KS1, KS2, KS4, SS1, SS2, SS3, SS5

Examples Included:

The number of LTF's to be built can be reduced by connecting road systems between Neets Bay and Virgin Bay. #001-015, 017-041, 043-049, 051-072, 074-076, 078-090, 093-188, 190-211, 214-219, 221-233, 237-257, 259-291, 293-338, 341-394, 396-429, 432-434, 436-471, 473-523, 525-548, 550-639, 641-647, 649-666, 668-678, 680-708, 710-721, 723, 771, 787-811, 814-826, 829, 830, 832

The LTF at Virgin Bay and the road accessing it should be dropped. The units on this system should be connected by road to the system tributary to the LTF (LTF Site# 5) at S.W. Neets Bay. #858

Connecting the Neets Bay and Traitor's Cove road system would greatly reduce transportation and mobilization costs between these two areas. #852

We request the agency to build no new LTF in Traitor's Cove ....There are other alternative roads that could be planned to access most of the timber units scheduled to be serviced by these LTF's. The Forest Service could enter this area using the road connected to the Neets Bay LTF (site #17). #853

Forest Service Response:

Additional field examination between the DEIS and FEIS has identified alternative road locations to be considered at Virgin Bay and Traitors Cove. The need for these 2 LTF's have been eliminated, and they are not included in the FEIS. The adjusted road locations are identified in Chapter 3 and on the alternative maps.

Issue 1S: Neets Bay to Shrimp Bay road connection.

Letters and Comments on this Subject Include:

726

Examples Included:

It appears to me that the LTF on the west end of Traitors Cove could be eliminated and ....units.... could be taken to the existing LTF .... The same applies to the new LTF on the NW shore of Neets Bay with that volume going to Shrimp Bay. #726

Forest Service Response:

Additional field examination between the DEIS and FEIS have identified alternative road locations to be considered at Virgin Bay and Traitors Cove. Additional review has not identified a suitable access route to connect the Chin Point area to the LTF at Shrimp Bay.

Issue 1T: Modify alternatives 3 & 6 to include upper Klam Creek and Neets Valley units and roads.

Letters and Comments on this Subject Include:

777, 871

Examples Included:

All of the proposed alternatives contain a proposal to construct roads into the Klam Creek drainage, above Klu Bay. Alternatives 3 and 6 propose development of a 3-mile spur ....The Forest Service is encouraged to incorporate the longer road corridor into the selected alternative and take measures in the design and construction of the road for protection and later conversion for use as a part of the off-island road. #871

Forest Service Response:

The IDT team developed alternatives to address multiple issues and concerns. Each alternative has a theme or range of issues it seeks to address. Alternatives 3 and 6 address the theme of improved economics by excluding the costly roading and low volume areas typical within the Klam Creek and Neets Valley drainages. Alternatives 2, 4 and 5 explore the benefits and costs of accessing additional areas within the Klam Creek and Neets Valley areas.

A mid-market economic analysis using the NET-4T computer program was performed to determine the stumpage value of the timber in Klam Creek and Neets Valley. The alternative 2 units were used because they represent the reasonably foreseeable future and the maximum level of harvest within Forest Plan standards and guidelines. Therefore alternative 2 represents the maximum volume over which to spread fixed costs such as road construction. The stumpage return for each area independent of volume from other areas in the alternative were:

Projected Stumpage Receipts for Klam Creek and Neets Valley using Alternative 2 Harvest Configuration

Name of Drainage	Harvest Volume (MMBF)	Projected Stumpage ($/MBF)
Neets Valley	174.1	- 137.69
Klu/Klam CR	198.5	- 64.68

SOURCE: Rhodes, 1993. Note: This information derived from NET-4T program.

When the Neets Valley and Klam Creek alternative 2 entries are combined with the existing alternatives 3 and 6, the resulting stumpage is as follows:

Projected Stumpage Receipts with Klam & Neets in Alternatives 3 & 6

Alt.	Alternative Volume (MMBF)	Current Stumpage ($/MMBF)	Stumpage with Klam & Neets Harvest ($/MMBF)
3	174.1	+ 16.03	- 1.04
6	198.5	+ 17.50	+ 1.98

SOURCE: Rhodes, 1993
Note: This information derived from NET-4T program.

The reason most people gave for wanting an entry into Klam and Neets added to alternatives 3 and 6 was: (1) that it would build more miles of road along the potential utility corridor route, and (2) alternatives 3 and 6 provided an economical offering. The extremely negative stumpage values, representative of the difficult road building and logging characteristics of these two areas, would drive these two alternatives to the point of being uneconomical. In fact alternatives 2, 4, and 5 are marginal to uneconomical, due primarily to harvesting timber in Neets Valley and Klam Creek. It is also important to note that any alternative would be broken up into 4–6 offerings, centered around LTF locations, that yield roughly 25 to 50 MMBF each. At stumpage rates of $-64.68 to $-137.69 it is very likely that KPC would reject these two offerings and highly unlikely that an independent operator would buy the offering. Also see response to issue 1A.

Issue 1U. Specific comments on the North Revilla DEIS.

Comments Include:

The range of $/MBF is $2.45 to $40.16. Am I correct in my math to compute total revenue ranges from $526,750 to $8,072,160? The range for road, bridge and LTF construction is $14,630,000 to $24,290,000 ([DEIS]Table Sum-3, p.20). Where are the profits? #744

Forest Service Response:

See response to issue 1A and 1F. The calculation of stumpage rates using a residual value appraisal system such as the mid-market system used in Region 10 has the logging and transportation costs already subtracted. Therefore the stumpage values listed have already had the road construction costs deducted and are net values. Agency sale preparation costs are not included in the calculation of stumpage values.

Comments Include:

Prescribed burning should be dropped as a silvicultural treatment. Burning done on Prince of Wales Island and on N. Revilla study area has had a detrimental effect by scorching the soil and retarding restocking by several years. #858

Forest Service Response:

See response to issue 1N. Forest Service monitoring results indicate that burning may have detrimental effects on hemlock or spruce plant associations. In these cases, the soil generally is not scorched, but the removal of low ground vegetation may expose the remaining duff layer to seasonal drying. Since tree species local to the area do not put down tap roots, they are susceptible to rapid drying of the duff layer. Generally within 3–4 years of burning, ground cover is re-established. The ground cover then modifies the micro-environment to the point where natural regeneration is protected from rapid drying of the duff layer and can proceed to be successful. The Ketchikan Area no longer burns these plant associations.

Plant associations containing a high percentage of red or yellow cedar are the places where the Forest Service would consider prescribed burning. These sites often have a high percentage of cull material, which often has abundant limbs and other fine fuels (1–10 hour fuels) attached to it. The Regional standards for a successfully regenerated site are 300 trees per acre and at least 60 percent stocking (60 percent of the area is stocked with commercial tree species). Excessive residual fuels can mean that the site cannot be regenerated without some form of site preparation. Unlike previous broadcast burns, the objective on these sites would be to jackpot burn, which refers to burning only the larger piles or clumps of slash. The elimination of the fines (1-10 hour fuels including twigs and branches) will cause the larger logs to fall down to the ground and enable hand planting crews to find more plantable spots. Jackpot burning would only be attempted if: (1) a post logging exam indicated that excessive fuels existed, (2) the site is scheduled for hand planting, (3) it was determined that NMFA regeneration requirements cannot be achieved without burning, or (4) Area smoke management objectives can be achieved.

It is anticipated that little or no prescribed burning will actually be implemented. However, it is prudent to be prepared in case prescribed burning is required to meet NFMA direction. It is also

important to collect essential reforestation dollars, so that they are available if needed to meet the legal requirements of NMFA. Yearly reviews of the KV fund return unused/unneeded funds to the treasury.

Comments Include:

Units 735-5037, 735-5038, 736-6011 and 737-7009 should be converted to roaded conventional harvest or dropped due to the difficulty of operating a helicopter yarding operation to the water. #858

Forest Service Response:

These units do not occur in alternatives 3 or 5. Originally units 6011 and 7009 were roaded cable units. The existing LTF and alternate sites were not suitable or likely to ever be approved by the various permitting agencies. Therefore, in several alternatives helicopter yarding to a barge is being considered. While this is more difficult and costly, it allows examination of the feasibility of harvesting a variety of operability classes.

Comments Include:

Units 733-3023 would be easy to access with a road and log conventionally. It should either be roaded or left out of the offerings until such time as a road system is included. It should not be helicopter logged. #858, 859

Forest Service Response:

Unit 3023 is not included in alternatives 2,3 or 5. The option for roading this unit was explored several times. Proceeding from east to west: first, a large bridge would be required to cross Klam Creek. The single unit provides only a small volume to spread this fixed cost against. After crossing the creek, steep side slopes prevent gaining enough elevation to get above a small cliff at the bottom of the unit. The unit itself has decent ground, but roading the unit isn't practicable. It will remain a helicopter unit.

Comments Include:

Unit 733-3004 is a more economic harvest unit than units 733-3020 and 733-3021 in the same location. #858, 859

Forest Service Response:

Unit 733-3004 is a more economical unit from a timber purchaser's standpoint, and it is included in Alternative 2. At 145 acres it exceeds the NFMA guidelines for a created opening. Visual quality, subsistence, soil and water quality considerations led the IDT to adopt the smaller unit configurations in the other alternatives.

Comments Include:

Unit 733-3007 is a more economic harvest unit than unit 733-3022 and would have no more impacts on the area than unit 733-3022. #858, 859

Forest Service Response:

The unit configuration has been added to alternatives 2, 4, 5 and 6.

Comments Include:

Unit 733-3011 is a more economic harvest unit than unit 733-3019 and would have no more impacts on the area than unit 733-3019. #858, 859

Forest Service Response:

Unit 3011 contains six additional acres of volume class 4 and three acres of volume class 5, which will yield an additional 244 MBF with little additional road construction. Although the configuration of 3011 is more economical, the IDT decided to retain unit 3019 in alternative 3 and 6. The nose of the two additional settings in 3011 drops down into Klu Bay. Both configurations meet the visual prescription but 3019 in combination with the other units in alternative 3 and 6 will have less of an impact to the viewshed around the twin waterfalls (creeks) at Orchard lake.

Comments Include:

The northern portion of unit 737-7053 could probably be logged conventionally without any resource damage. This option should be left open. #858, 859

Forest Service Response:

The upper knob of this unit is steeper than it looks, with little opportunity for roading. The broken nature of the topography makes it diificult to road and yard as multiple settings would be required to get this little jag of timber. The excessive amount of road, in a concentrated area, to access a small volume of timber, raised soil stability concerns as well. The IDT decided to retain the upper setting for helicopter yarding.

Comments Include:

The southern portion of unit 736-6010 should be added to the group of units that include units 6008, 6030, 6031 and 6032 in VCU 736. #858, 859

Forest Service Response:

The IDT examined this suggestion and rejected it because the additional visual disturbance would exceed the VQO objective of modification.

Comments Include:

Unit 737-7017 is a more economic unit than unit 737-7048 without any additional impacts on the area. The leave strip before unit 737-7052 should also be added. #858, 859

Forest Service Response:

The Forest Service disagrees. Unit 7017, which includes the leave strip before unit 7052, would result in one large unit of 118 acres. This would leave only a small patch of timber to carry a future entry. In all likelihood it would be uneconomical to come back and re-open the road for so little volume. The IDT prefers to leave several patches of timber scattered along the road system to maintain the economics of potential future entries. Field reconnaissance also indicates that the configuration of units displayed in alternative 2 would be less economic than it appears. The switchbach displayed in unit 7018 is impractical because of a small cliff. The upper settings in unit 7018 were converted to helicopter yarding and dropped. The road to unit 9011 has been relocated (see Alternative 2 FEIS Map).

Comments Include:

Unit 738-9002 should be extended west to the next major creek. #858, 859

Forest Service Response:

A unit with that configuration (9075) is analyzed in Alternative 5.

Comments Include:

Unit 738-9001 is a more economic than unit 738-9068 and has no additional impacts on the area. #858, 859

Forest Service Response:

The Forest Service disagrees. Unit 9068 is a cable unit accessed through 8030. Unit 9001 is a helicopter unit. The visual quality objective of modification can be met through the combination of units 8030 and 9068 or 8030 and 9001, but not by all three. From an economic standpoint units 8030 and 9068 (all cable logging) are superior, and they also do a better job of meeting other resource concerns. Unit 9068 will be retained in its present configuration in alternatives 3, 5 and 6. Unit 9001, which harvests more timber and is consistent with the criteria for Alternative 2, will be retained in that alternative.

Comments Include:

The boundary in unit 738-8064 should be moved west to encompass the road system switchback to avoid any blowdown between the current proposed boundary and the road right-of way. #858, 859

Forest Service Response:

The Forest Service disagrees that the entire setting boundary needs to be moved. It appears that the road right-of-way clearing will remove the 1–2-acre patch of timber that would be windthrow prone on the inside of the switchback. The actual location of the switchback may vary slightly when the engineering crews and timber crews do the final road and unit layout. Professional

layout crews have the responsibility and the obligation to make minor changes in the unit boundary configuration based on actual ground conditions, if required to protect the resources or meet other objectives stated in this EIS. (See also response to issue 18.)

Comments Include:

Unit 738-8051 is a more economic unit than unit 738-8061 without any additional impacts on the area. #858, 859

Forest Service Response:

The IDT added unit 8051 and dropped 8061 from Alternative 6. The original configuration along that road segment consisting of unit 8061 and unit 8060 is retained in Alternative 3 for comparison purposes.

Comments Include:

Unit 739-9043 should be dropped because of the extreme amount of of road required to access the small volume, unless there are additional settings or units that could be added in that area. #858, 859

Forest Service Response:

This particular unit will not be included in the FEIS in alternatives 4, 5 or 6. This area is part of a proposed old-growth habitat block that will be managed to provide old-growth habitat conditions for the period while this NEPA document is in effect.

Comments Include:

Unit 739-9029 is a more economic unit than unit 739-9059 and has no greater impacts on the area. #858, 859

Forest Service Response:

Unit 9029 is now labeled 9529 after it was reconfigured between DEIS and FEIS. Based on additional analysis, the northeast unit boundary was pulled back to the west to maintain the windfirmness of the riparian buffers along Traitors Creek.

Unit 9059 contains 3202 MBF and uses approximately the same amount of road as unit 9529 which now yields 3023 MBF. The economic advantage of one unit versus the other appears to be negligable. The IDT examined this comment carefully, but decided to retain unit 9059 in alternatives 3 and 6. Unit 9529 is retained in alternative 2.

Comments Include:

Units 738-8008, 8018, and 8023 should be included in the Alternative 6 section. These appear to be a good example of the type of unit suited to helicopter logging. #858

Forest Service Response:

The IDT examined the possibility of adding units 8008, 8018, and 8023 to Alternative 6. The Forest Service agrees that units 8018 and 8023 would make good additions to Alternative 6 and would help offset the loss of volume due to unit deletions in Traitor's Creek. One of the selection criteria used to formulate Alternative 6 was to try to minimize harvest levels adjacent to Margaret Lake, where the Forest Service has invested a considerable amount of time and effort into fisheries monitoring. Unit 8008 is immediately above the lake. The probability of a mass wasting event occurring is low, but taking that risk above Margaret Lake is inconsistent with the theme of Alternative 6.

Comments Include:

Additionally, we would like to propose an additional road connection between units 8056, 8057, 8045, and 8058 and the units immediately to the north. In this way, logs from the identified units could be watered at the South Neets Bay LTF, eliminating the need for a new LTF on State owned land in Traitors Cove. #868

Forest Service Response:

See response to issue 1Q and 1R.

Comments Include:

We question the usefulness of the "Windthrow risk" information included in the unit cards. Unless we missed one, all of the units are classified as being "H", which we assume means "High." To be useful, information regarding the risk of windthrow would need to be tied to some form(s) of mitigation. #876

Forest Service Response:

The Forest Service strongly disagrees. In Appendix H of the DEIS (Silviculture Diagnosis), the windthrow risk is listed on a setting-by-setting basis. For example, Alternative 6 listed 121 settings as having a moderate windthrow risk rating. The Forest Service feels that a setting-by-setting listing of windthrow risk by alternative is as site-specific and detailed as it is possible to achieve. This information was used extensively in preparation of the alternatives and mitigation. Windthrow risk helped to determine the range of acceptable silvicultural practices. For example, in areas with a high windthrow risk rating, no partial cutting was scheduled inside the riparian zone, where it would have otherwise been allowed. Windthrow risk ratings are also useful after the sale, to help determine if light windthrow should be salvaged or left in place to help prevent further unraveling of the stand.

Issue 2. Fish Habitat and Water Quality

Issue 2A. The effectiveness of BMP's and riparian buffers in protecting fish habitat and water quality.

Letters and Comments on this Subject Include:

001-041, 043-070, 073-076, 078-090, 092-233, 237-409, 412-419, 421-481, 484-491, 493-713, 715, 716, 718-721, 725, 727, 744, 745, 748, 749, 751, 753, 756, 771, 774, 775, 779, 785, 787-807, 809-826, 829, 830, 832, 852, 853, 857-860, 862, 863, 867, 873, 876, KS1, KS2, KS6, KS7, SS4, SS6,

Examples Included:

We support the continued use of Best Management Practices (BMP's) as the most effective way to protect other resources during construction and harvest. These BMP's can be updated as new information and practices are developed. #001-041, 043-070, 073-076, 078-090, 092-233, 237-409, 412-419, 421-481, 484-491, 493-713, 715, 716, 718-721, 725, 727, 771, 779, 787-807, 809-826, 829, 830, 832, 852, 858, 859

...we are suggesting 200-ft. buffer zones be adopted or better yet, stay out of the river drainages which are providing enhancement for fisheries. #727

The "Best Management Practices" are totally deficient in protection of "resources other than timber" and indeed do not provide adequate protection for the growing of timber during the next rotation. #785

TTRA mandated buffers on Class I and some Class II streams are adequate to fully protect the stream. For Class II streams, orange and white protection guidelines are sufficient and for Class III water quality streams field tests have shown that partial suspension across the stream course and removal of any debris concentrations will protect water quality. #858

Our primary concerns are for the sale's impact on water quality. We are concerned that assuring that best management practices are implemented may not ensure that the Alaska Water Quality Standards (WQS) are being met. Water quality monitoring is required to ensure compliance with WQS. WQS may be exceeded as a result of the proposed sale. Additional information is needed on effectiveness monitoring from the water quality effects of timber harvest and road construction. #863

Forest Service Response:

The Clean Water Act (Sections 208 and 319) recognized the need for control strategies for nonpoint source pollution. To provide environmental protection and improvement emphasis for water and soil resources and water-related beneficial uses, the National Nonpoint Source Policy (December 12, 1984), the Forest Service Nonpoint Strategy (January 29, 1985), and the USDA Nonpoint Source Water Quality Policy (December 5, 1986) were developed. Best Management Practices (BMP's) were recognized as the primary control mechanisms for nonpoint sources of pollution on National Forest System lands. This perspective is supported by the Environmental

Protection Agency (EPA) in their guidance, "Nonpoint Source Controls and Water Quality Standards" (August 19, 1987).

Use of BMP's is a means to ensure protection of resources and uses, while achieving multiple use objectives. Application of BMP's represents the state-of-the art technology for nonpoint source pollution control. The reasonable implementation, application and monitoring of BMP's, in effect, achieves compliance with the intent of the Clean Water Act, State water quality standards and consistency with the State's nonpoint source program. The EPA Water Quality Standards Handbook, Chapter 2, states:

"Proper installation, operation and maintenance of State approved BMP's are presumed to meet a landowner's or manager's obligation for compliance with applicable water quality standards. If subsequent evaluation indicates that approved and properly installed BMP's are not achieving water quality standards, the State should take steps to: (1) revise the BMP's, (2) evaluate and, if appropriate, revise water quality standards (designated beneficial uses and water quality criteria) or both."

Best Management Practices (BMP's) are designed to meet and maintain State water quality standards. The Forest Service cooperatively works with the Alaska Department of Environmental Conservation (DEC) under a Memorandum of Understanding (MOU) relative to BMP implementation and effectiveness. BMP's are the primary tool on the Tongass National Forest to mitigate the effects of logging activities on water quality. This project is consistent with the State of Alaska's antidegredation policy and will maintain and protect existing instream water uses and the level of water necessary to protect the existing uses.

The Forest Service maintains that reasonable implementation, application, and monitoring of BMP's in effect achieves compliance with the intent of the Clean Water Act and State water quality standards (R10 Amendment 2509.22-91-1). The Forest Service position is that timber harvest and road construction activities controlled by BMP's and monitored for effectiveness will not exceed State water quality standards and will not violate Federal anti-degradation policy. (See response to issue 2C) Continued monitoring and evaluation of BMP's will assure that water quality standards are being met. The monitoring plan has been rewritten and strengthened in the FEIS for the North Revilla Project Area (See Chapter 2).

Issue 2B. The Southern Southeast Regional Aquaculture Association (SSRAA) fish hatchery at Neets Bay, Forest Science research in Margaret Creek, and important fisheries in Traitors Creek need protection.

Letters and Comments on this Subject Include:

724, 729, 742A, 743, 754, 756-760, 774, 777, 779, 786, 853, 854, 857, 860, 873, 875, KS1, KS4, SS4

Examples Included:

I am opposed to Alternatives 2, 4, and 5 for the following reasons:
1) These alternatives will negatively impact the Bluff Lake drainage which is the water source for the Neets Bay Hatchery. #742A

One of the most important aspects of the Margaret Lake drainage is the long-term Forest Science Lab fisheries research project being conducted on the relationship between resident salmonids and introduced anadromous stocks. ...we are requesting the Forest Service to stay out of these areas.

The units listed below reflect this request coupled with minimizing the new road construction and large areas of clearcuts.

We are also concerned that you have not adequately addressed the impacts on water quality and how these will affect fisheries resources in...Traitors Cove...areas. #860

Forest Service Response:

The SSRAA fish hatchery at Neets Bay is operated under a Special Use Permit from the Tongass National Forest. The Special Use area, including the hatchery site and the area immediately around Bluff Lake has been excluded from timber harvest in this plan. The rest of the Neets Creek drainage, contained in VCU 737, and the Margaret Creek drainage, location of the Forest Science Lab research project, in VCU 738 are designated as Land Use Designation (LUD) IV by the Tongass National Forest Land Management Plan. LUD IV areas are designated to provide opportunities for intensive resource use and development where emphasis is primarily on commodity or market resources. Margaret Creek is recognized as an important research project and the source of important fisheries on Revillagigedo Island. Traitors Creek is recognized as the source of important fisheries on Revillagigedo Island. VCU 739 which contains the Traitors Creek drainage, is designated as Land Use Designation (LUD) III by the Tongass National Forest Land Management Plan. LUD III lands will be managed for a variety of uses. The emphasis is on managing for uses and activities in a compatible and complimentary manner to provide the greatest combination of benefits. These areas have either high use or high amenity values in conjunction with high commodity values. As such, those lands which are suitable and available for timber production in the Neets Creek, Margaret Creek and Traitors Creek valleys has been evaluated in the North Revilla Project Plan in a manner which is compatible and complimentary with other uses.

The development of alternatives addresses specific issues which may arise during the project planning process. The issue of potential impacts of the proposed North Revilla Project upon the SSRAA operation is addressed in the FEIS through the development of Alternatives 1, 3 and 6, which minimize development in the Neets Creek watershed. The issue of potential impacts of the proposed North Revilla Project upon fishery values in Margaret and Traitors Creeks is addressed in the FEIS through the development of Alternatives 1, 4 and 6, which minimize development in the Traitors Creek and Margaret Creek watersheds. The North Revilla FEIS includes an analysis of the risk of sediment transfer in the Neets Creek and Traitors Creek watersheds. In all alternatives beneficial uses, including fish propagation, of area waters will be protected by the application, operation and monitoring of BMP's. (See response to issue 2A and Unit Card Appendix for site-specific BMP's).

Issue 2C. Fish/watershed management recommendations should be site specific.

Letters and Comments on this Subject Include:

854, 873, 876

Examples Included:

The agency (FS) has done no site specific cumulative effects analysis for this (Traitors Creek) watershed. #854

The State commends the Forest Service for the excellent analysis and completeness of unit-specific soil concerns. The soils information included in the planning-level cards should be a model for other timber sale EIS's. #873

...Fish/Watershed recommendations should be more site-specific. The inclusion of site-specific recommendations is the only way to avoid extensive additional unit card and/or field reviews prior to harvest. #873

Forest Service Response:

Recommendations identified on unit cards in the North Revilla DEIS are based mainly upon remote sensing analysis of the proposed harvest units. Information obtained in reconnaissance has been incorporated into more site-specific recommendations in the North Revilla FEIS. Information obtained during sale layout will be incorporated into harvest unit design.

Additional information on units which will require buffer strips has been added to the front of Appendix L, Unit Cards. Units near streams are listed and buffer prescriptions described. In addition, the Mitigation Measures Common to all Action Alternatives section in Chapter 2 discusses the stream buffering that will be done. Although permitted under TTRA, no yarding is planned across TTRA mandated buffer strips, and timber will be directionally felled away from stream buffers.

Issue 2D. Watershed cumulative effects analysis needs to be addressed.

Letters and Comments on this Subject Include:

744, 854, 860, 867, 873, 876, KS4

Examples Included:

Have the cumulative effects of previous harvests been measured? If the guidelines for timber harvest is 35% within a 15-year period, where is the data to show the lack of impact on fish species? #744

The agency (FS) has failed to provide a cumulative effects analysis for any watershed. The acceptable threshold standard of 35 percent ground disturbance of the land base to any watershed within a 15 year period, is insupportable. #854

Forest Service Response:

The cumulative watershed effects analysis for the North Revilla Project Area is displayed in Chapter 3 of the FEIS. The standard displayed here and evaluated is described in the Draft Supplement to the Tongass Land Management Plan Revision, pg. 4-63 "Dispersion to Minimize Cumulative Watershed Effects." This process was used because of a lack of available information and analysis tools to conduct a more detailed cumulative watershed effects analysis; it includes the best information available at this time. Forest Service Handbook 2509.22, Soil and Water Conservation Handbook R10 Amendment 2509.22-91-1, 12.1 states that:

An acceptable analysis (cumulative watershed effects) includes such components as: watershed condition, watershed sensitivity, threshold-of-concern criteria, and mechanisms for quantifying existing and proposed alternative management activities.

At this point, these components are not available in any greater detail for Ketchikan Area than displayed and utilized in the North Revilla DEIS.

Issue 2E. Areas or units with high potential for landslides should be modified or deleted.

Letters and Comments on this Subject Include:

757, 774, 854, 857, 873, 875, 876

Examples Included:

Of the 21 units proposed in this watershed (Traitors Creek) in Alternaitve 3, only two, (9021 and 9061) appear to be loggable without excessive problems and excessive risk of landslide erosion... #854

Units 7094,7030,7093,7031 are of special concern due to their location in areas of steep terrain and unstable soil. #857

Area with high MMI (mass movement index) ratings represent potential sediment sources due to erosion and mass wasting. The State assumes that such areas or units will be modified or deleted before the units reach the final layout stage, and that this information will be made available in the FEIS. #873

Forest Service Response:

There are four levels of soil mass movement index identified in the Area: very high, high, moderate and low. Very high mass movement index soils are classified as unsuitable for timber production. High mass movement index soils are presently classified as suitable forest lands. During the environmental analysis, the interdisciplinary team identified unstable areas using input (Soil Resource Inventory Maps, Geology Maps, Slope Maps) provided by various resource staffs. If management activities cannot be designed without causing long-term effects on soil and water resources they will be recommended for reclassification as unsuitable forest lands. The interdisciplinary team has disclosed the risk and potential impact of slope failure in the FEIS.

Road construction on very high mass movement index soils is avoided whenever possible. FSH 2509.22 - Soil and Water Conservation Handbook R10 Amendment 2509.22-91-1 describes timber management and transportation planning to assure soil and water resource considerations. BMP 13.5, *Protection of Potentially Unstable Areas* is designed to protect potentially unstable areas and avoid landslides. BMP 14.2 *Location of Transportation Facilities* states that "roads, trails and LTF's will be located to avoid unstable, sensitive or fragile areas to the extent possible."

Issue 2F. Mitigation measures for fish habitat and watershed resources should be included in this plan.

Letters and Comments on this Subject Include:

744, 853, 863, 854, 873

Examples Included:

What assumptions are made for the success of erosion control to meeting water quality objectives relative to size of storm events? #863

Mitigation measures to fish and wildlife habitats as well as water quality should address both the direct effects and cumulative effects. #873

...the EIS must identify mitigation measures for both units and roads which may disturb unstable soils. #873

Forest Service Response:

Mitigation measures are site-specific management activities to reduce the adverse impacts of timber harvest, road construction or other development activities. The North Revilla Project uses unit cards to display appropriate mitigation measures which will be applied on a site-specific basis (See the Unit Card Appendix for unit specific mitigation measures).

Mitigation measures are applied following inventory and analysis of land management proposals. Mitigation measures generally require several resource specialists to assess on-site potential for impacts. Field data is collected to help predict impacts and identify mitigation measures. The data is analyzed to identify site-specific specifications designed to protect the resources. Factors which affect mitigation design vary from site to site. The extent and kind of impact are also variable. No single mitigation measure, method, or technique is best for all circumstances.

Issue 2G. Monitoring of BMP's should be included in the plan.

Letters and Comments on this Subject Include:

744, 854, 863, 873

Examples Included:

The agency (FS) has proposed an inadequate monitoring program for these buffers. Given the agency's frequent failures to meet mandatory TTRA buffer requirements, the agency should monitor every unit for compliance. #854

The final FEIS should include types of surveys, location and frequency of sampling, parameters to be monitored, indicator species, budget, procedures for using data or results in plan implementation, and availability of results to interested and affected groups. #863

How will implementation of needed stream-crossing structure improvements be assured? #863

Forest Service Response:

Monitoring of the implementation and effectiveness of water quality and fish habitat protection measures is planned and described in the North Revilla FEIS Chapter 2. Monitoring will include an evaluation of implementation of BMP's for the protection of water quality and implementation and effectiveness of stream buffers to protect water quality and stream habitat. Not all project parameters will be monitored.

This plan includes site-specific implementation and effectiveness monitoring of selected mitigation and protection measures. This section describes monitoring objectives, desired results, measurements, thresholds, corrective action, responsible staff, record of results, annual cost and personnel needs. Monitoring is also conducted on the Forest Plan level, providing the public, the Regional Forester, and Ketchikan Area managers with information on the progress and results of implementing the Forest Plan. The FEIS displays and describes the mitigation/monitoring feedback loop.

The Ketchikan Area is in the process of developing a BMP effectiveness monitoring plan. The list of possible monitoring activities on this project is long and of necessity is limited to those of highest priority. Although there will be overlap between monitoring requirements of the project plans and the Forest Plan, no single project monitoring plan is expected to address all of the questions identified in the Forest Plan.

Implementation of mitigation measures will be monitored during and after project implementation. Implementation monitoring will be conducted on a variety of mitigation measures, including TTRA stream buffers, other stream buffers, slope stabilization and erosion control, eagle nest buffers, wildlife snags, Steller sea lion habitat, trumpeter swan wintering area, beach fringes, estuary fringes, and riparian habitat.

The effectiveness of mitigation measures is evaluated by effectiveness monitoring as part of the Forest Plan and additional project level monitoring identified in the FEIS, Chapter 2. Effectiveness monitoring seeks answers about the effectiveness of design features or mitigation measures in protecting natural resources and their beneficial uses. Results of effectiveness monitoring are evaluated and practices are adjusted and refined as needed to better meet the management objectives.

Issue 2H. Effects on salmon habitat need to be addressed.

Letters and Comments on this Subject Include:

734, 744, 756, 853, 858, 859, 860, 862B, 867, 873, SS1, SS3

Examples Included:

Where will the long-term impacts on spawning gravel availability and rearing habitat for salmonids be conducted? #744

Water temperature has naturally varied and risen well above the 65 degree fahrenheit maximum identified in the Alaska Water Quality Standards. This needs to be taken into account on any temperature studies that might be done in the project area. #858

Both the road building and cutting plans need further study to assure there will be no negative impacts on these important fish habitat areas. #860

Forest Service Response:

Timber harvest has a potential to decrease fisheries production through such negative effects as sedimentation (loss of spawning gravels), oxygen depletion, temperature change, and loss of large woody debris. The Forest Service has developed an aggressive policy to minimize these negative

effects through such beneficial practices as limiting the size of units and their location, designing roads away from streams and observing legislated minimum 100-foot width stream buffers, timing road construction activites in salmonid streams to correspond to least damaging periods, use of Riparian Management Areas (RMA's), avoiding harvest activities on very high mass movement soils, implementing BMP's, and monitoring. Also see response to issue 2A. For analysis of the effects of the proposed action upon salmon habitat, see Chapter 3, Fisheries, of the FEIS.

Issue 21. Specfic comments on the North Revilla DEIS.

Comments Include:

What projects are scheduled in the project area to mitigate timber harvest effects on fisheries? What types of projects are expected? Will habitat restoration be implemented in the project area? How many acres of habitat will be restored? #744

Forest Service Response:

See response to Issue 2F.

Comments Include:

What data do you have on water quality monitoring? Is any of it from the proposed North Revilla project area? What water quality standards do you use?...What monitoring has been done on fish populations before and after road construction and culvert placement? Which species have been studied? How many unharvested drainage basins have been measured for present habitat quality and quantity for fish? Where will the long-term impacts on spawning gravel availability and rearing habitat for salmonids be conducted? #744

Forest Service Response:

Enhancement projects are discussed in the FEIS, Chapter 3, Fisheries, Direct, Individual and Cumulative Effects, Fish Habitat section. The North Revilla Project analyzes the effects of alternative means of harvesting 200 MMBF of timber. It is not a management plan for the North Revilla Project Area. Fish enhancement projects (other than Sale Area Betterment projects funded by K-V collections), campgrounds, boat ramps, and other projects will be analyzed in other environmental assessments.

See response to Issues 2A and 2G.

Comments Include:

The final EIS needs to fully integrate Section 319. Existing water quality conditions in the National Environmental Policy Act documents need to reflect and reference the state's water quality assessment. #863

Forest Service Response:

See response to Issue 2A.

Comments Include:

Direct or indirect nonpoint source water quality effects need to be reduced through design and through mitigation measures to insure that the project is consistent with the state's nonpoint source program. #863

Forest Service Response:

See response to issues 2A and 2F.

Comments Include:

Will any water supply watershed be affected by this project? #863

Forest Service Response:

There are no municipal water supplies within the Project Area.

Comments Include:

The final EIS needs to include full protection of first and second order streams. #863

Forest Service Response:

First and second order streams within the Project Area are typically classified as high gradient, contained channels with an Aquatic Habitat Management Unit classification of Class III streams. Forest Plan standards and guides provide for the protection of these streams.

Class III streams will be managed to the extent required to maintain water quality and protect beneficial uses. At a minimum, management of Class III streams in the proposed North Revilla Project Area is intended to be consistent with the management prescriptions described in the TLMP Supplement to the DEIS Proposed Revised Forest Plan for the Stream and Lake Protection Land Use Designation, pgs. 3-180 thru 3-205. At a minimum, no programed commercial timber harvest is allowed within 25 feet of Class III streams on *some* channel types. Most channel types allow timber management activities with approved BMP's up to the banks of Class III streams.

Mitigation measures in the form of BMP's designed to protect Class III streams are identified for specific harvest units in the Fish/Watershed section of the unit cards, Appendix K. Additional site-specific mitigation may be recommended upon layout of a proposed harvest unit.

Comments Include

We are opposed to Alternative 2, Unit Numbers 7022-7037 all fall in the watershed that potentially could influence SSRAA's program. #857

Forest Service Response:

These units have been reviewed by the IDT and have been found to pose minimal risk to the SSRAA operation at Neets Bay. Also see response to Issue 2B.

Comments Include:

SSRAA has less concern with this alternative (3) since it eliminates the majority of timber activity in the Neets Bay Hatchery watershed. We do have a concern with units 7049, 7048, 7016, 7020, and 7050 since we have information that indicates drainage in the area of these units enters Neets Lake or Neets Creek. #857

Forest Service Response:

Proposed harvest units 7020, 7049, and 7050 have been inspected by the IDT and found to pose minimal risk to the SSRAA operation at Neets Bay. Also see response to Issue 2B.

Comments Include:

We are opposed to Alternative 4 for the same reasons expressed in Alternative 2. Units 7094, 7030, 7093, 7031 are of special concern due to their location in areas of steep terrain and unstable soil. #857

The Tongass Conservation Society asks the Forest Service to delete the following units (and any others that overlap them) from the final logging plan: Units 8040,8012,8038,8037,8006,8005,8003 and 8023. #853

We request that the following units (and any overlapping these) be excluded from the plan:

9001-9009, 9012-9041, 9044-9047, 9067, 8001-8003, 9030, 8052-8054, 6015. #853

You (FS) should not harvest the following units, because of risks to water quality in Traitors Creek, unacceptable cumulative watershed impacts, and risks to productivity of the land...

9019, 9026, 9028, 9031, 9037, 9039, 9040, 9052, 9053, 9054, 9056, 9057, 9058, 9059, 9060, 9063, 9064, 9065. #854

Forest Service Response:

See response to Issue 2B.

Comments Include:

We are opposed to alternative 5 for the same concerns expressed for Alterative 2 and 4. Units 7063-7074, 7025, 7028-7032, 7034 all suffer from the same potential slide danger as the others in this drainage area. #857

Forest Service Response:

Proposed harvest unit 7074 has been inspected by the IDT and found to pose a minimal risk to the SSRAA operation at Neets Bay. Also see response to Issue 2B.

Comments Include:

SSRAA has the same concern with Alternative 6 as it does with Alternative 3. The units of concern are 7051, 7052, 7048, 7016, 7020, 7050. #857

Forest Service Response:

Proposed harvest units 7020, 7050,7051 and 7052 have been inspected by the IDT and found to pose a minimal risk to the SSRAA operation at Neets Bay. Also see response to Issue 2B.

Comments Include:

Were any watershed sensitivity models run for cumulative effects, sediment transport, or temperature. #873

Forest Service Response:

See response to Issue 2D.

Comments Include:

Table 3-4 is somewhat mislabled. It describes cumulative VCU disturbance, not cumulative watershed disturbance. VCU's do not follow watershed boundaries within the project area, but typically include several watersheds. #854

Forest Service Response:

The North Revilla FEIS glossary defines the Value Comparison Unit (VCU) as "Areas which generally encompass a drainage basin containing one or more large stream systems; boundaries usually follow easily recognizable watershed divides. Established to provide a common set of areas where resource inventories could be conducted and resource interpretations made." The VCU's are designed to be common units of land upon which analysis of various resources and management strategies may be made. Therefore the North Revilla FEIS uses the VCU as the basis for a watershed cumulative effects analysis. The North Revilla FEIS also includes an analysis of the cumulative effects upon the watersheds mapped in the Project Area.

Comments Include:

Concerning effectiveness monitoring of BMP's, how many stream miles will be monitored for this project? #863

The text indicates that a best management practice (BMP) implementation monitoring strategy is under development for the Ketchikan area (page 2-42) and an effectiveness monitoring program for water quality and fish habitat is being developed on a forest-wide basis (page 2-59). We are concerned because a detailed implementation and effectiveness monitoring plan is not included in the draft EIS. #863

Stream buffer windfirmness is the only type of water quality monitoring proposed in the project area. While this is an appropriate and important issue, the plan needs to address other important BMP monitoring issues as well. #873

Has the Ketchikan Area proposed a budget for BMP monitoring over the life of the project? #873

Coordination is needed to ensure that valid monitoring data is collected and to avoid duplication of effort on different projects. Do Quality Assurance/Quality Control plans exist for water quality monitoring? Does the Forest Service plan to coordinate or integrate BMP monitoring for this project with the project areas on Prince of Wales Island? #873

Forest Service Response:

See response to Issue 2G.

Comments Include:

Slope stabilization is not included in the effectivenss monitoring section. How will slope stabilization plans that fail be corrected? #863

Forest Service Response:

See response to Issues 2A and 2G.

Comments Include:

In connection with validation monitoring, are there models being used to support environmental effects assumptions in this draft EIS? Is there validation monitoring to support fish habitat capability models, for example? #863

Forest Service Response:

There is validation monitoring to support environmental effects assumptions. For example, Steve Paustian (Tongass National Forest, Chatham Area, Sitka) developed estimates of smolt habitat capability for old-growth condition, based on all population estimates that could be found and attributed to a specific stream channel type in Southeast Alaska. The population estimates were made by National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the Alaska Department of Fish and Game, and the USDA Forest Service, including the Forestry Sciences Laboratory of the Pacific Northwest Forest and Range Experiment Station. For each location, where population estimates were made, the channel type was determined. Further documentation on the development of this data and correlation to channel type is in preparation by Paustian.

Comments Include:

What data and what current and proposed programs exist for establishing water quality baselines in the project area? Effectiveness monitoring cannot be well-implemented without this information. #873

Forest Service Response:

There is no existing baseline water quality data available for waters within the North Revilla Project Area. However baseline water quality data is available for adjacent areas, including the Orchard Creek and Carroll Creek systems.

Comments Include:

The Forest Service should reference specific BMP numbers and language on the unit cards. Such references are important to document and implement the BMP's and other resource prescriptions. They simplify and improve the BMP implementation and monitoring process. Soils, timber, and engineering comments included such references. Fish/Watershed comments did not, although fish/watershed specialist prescriptions imply references to (at a minimum) BMP's 12.6, 12.7, 13.9,and several sections of BMP 13.16.

DEC assumes that the reference to 'BMP 14' (in regard to minmizing the potential for landslides) in the engineering specialist prescriptions refers to the introduction to section 14 (Transportation Facilities) in the BMP Handbook (FSH 2509.22). If more specificity in the prescription of BMP's is desired, one or more of BMP's 14.2, 14.3, 14.6, and 14.7 should be cited, depending on the site-specific situation. Each of these BMP's relates in some way to minimizing landslide potential. #873

Forest Service Response:

The Fish/Watershed and Engineering sections of the unit cards have been updated in the FEIS to include specific BMP references.

Comments Include:

The Forest Service Notes that Klu and Subsistence [Klam] Creeks "may be described as potentially temperature sensitive." Has a determination been made on these creeks? If so, what, if any, mitigation is proposed? #873

Forest Service Response:

Klam and Klu creeks were described as potentially temperature sensitive streams in the North Revilla DEIS. Further evaluation of stream and watershed characteristics throughout the Project Area has resulted in a listing of potential temperature sensitive stream reaches in the FEIS. This specific unit listing occurs in Chapter 3 - Fisheries section and in the Unit Cards. Specific mitigation measures are also listed.

Comments Include:

Page 2-43: To be effective, the monitoring objective for "Roads-Soil and Water Protection" should be defined better. #873

Forest Service Response:

The monitoring objectives for "Roads-Soil and Water Protection" is better defined in the FEIS.

Comments Include:

Page 2-44: Water Quality and Fish Habitat: Does the Forest Service intend to train layout and sale administration employees in BMP implementation monitoring? Currently, the Area hydrologist and soil scientist are doing this monitoring. Given that it has taken two years for them to become proficient, how does the Forest Service propose to train timber and engineering staff in monitoring? #873

Forest Service Response:

The District Rangers and their representatives, generally the timber sale administrator, are responsible for the implementation of timber sale projects. These project implementation responsibilities include monitoring of BMP's and their implementation. Program responsibilities, and constraints upon personnel, time, and resources generally do not permit watershed program staff on a National Forest the opportunity to do all or any of planned implementation monitoring activities. Implementation monitoring is not a very technically involved process and can be easily managed by individuals with resource management training and experience. Timber sale administrators routinely carry out various functional (fish, wildlife, watershed, etc.) implementation monitoring activities throughout the National Forest system. The Ketchikan Area is not unique in this respect and its sale adminstration staff presently does this work.

Comments Include:

The introduction to this section states: "An effectiveness monitoring program is being developed on a forestwide basis in consultation with the State of Alaska." DEC is not aware of any such ongoing effort. The last meeting on the preparation of a forest-wide effectiveness monitoring program was held in July, 1991. Under the time table set out in the Alaska Nonpoint Source Pollution Control Strategy, such a program or action plan was due to be developed by September 1991. Since the July 1991 meeting, the forest-wide effort appears to have stalled. DEC has received a proposed effectiveness monitoring action plan from the Chatham Area, but nothing from the Ketchikan Area. If the Ketchikan Area is working on such a plan, DEC would like to assist in its development....

2) *The Ketchikan Area should use the effectiveness monitoring plan from Southeast Chichagof Timber Sale FEIS (including the monitoring errata sheet), and the associated draft effectiveness monitoring action plan for the Chatham Area as models for effectiveness monitoring of BMP's on water quality and fish habitat.*

3) *The Ketchikan Area is conducting two small-scale BMP effectiveness monitoring projects, but DEC has only received one brief interim report on one project. The Ketchikan Area should consider continuing or expanding these projects, and applying them to the North Revilla project.* #873

Forest Service Response:

The Ketchikan Area is in the process of developing a BMP effectiveness monitoring plan. The Area has developed a Water Quality Monitoring Proposal which would be implemented in cooperation with the Alaska Forest Association, State of Alaska DEC and the Ketchikan Pulp Company. The objective of this proposal is to do water quality criteria monitoring to measure the effectiveness of BMP design and implementation to achieve Alaska Water Quality Standards for sediment during road construction and timber harvest. Inputs and comments on this document can be made through Larry Meshew, Ketchikan Area Ecosystem Staff Officer.

Also see the response to issues 2A and 2G.

Comments Include:

The final EIS needs to include a feedback mechanism which relies upon monitoring so that standards and guidelines, BMPs, standard operation procedures, intensity of monitoring, and timber sale administration are adjusted when effectiveness monitoring indicates a need. #863

Forest Service Response:

The feedback loop was described in Fig. 2-12 in Chapter 2 of the North Revilla DEIS and is also included in Chapter 2 of the FEIS. Also see response to issues 2A and 2G.

Comments Include:

Apparently the agency assumes that adequate fish habitat protection through the use of buffer zones and BMP guidelines will be enough. We request that the agency (FS) show how the planning team will account for the fact that a large percentage of buffer is second growth, rendering it less protective and effective than old growth leave strips. What are the impacts to a stream and fish communities even when a 100 foot old growth buffer exists? #853

Forest Service Response:

There is no evidence to suggest that buffer strips which consist of second growth timber and associated vegetation are significantly less effective in protecting water quality and fish habitat than old growth vegetation. See also response 1L.

Comments Include:

...how much LOD is available in the second growth stands to replace the current stream LOD needed for the next to 250 years until the riparian area is once again old growth stands. How will the Forest Service mitigate for this "diminished bank" or reserve of LOD? #853

Forest Service Response:

Recruitment of Large Organic Debris (LOD) will occur in the form of large diameter spruce, hemlock and alder stems, primarily, from existing old-growth riparian timber stands and second growth timber stands during the next 200 to 250 years. Areas of second growth timber may not provide for the recruitment of LOD in the same manner as "old growth" vegetation, but it does provide a source that will maintain fish habitat.

Comments Include:

Ben Mitchell's expert opinion supports our comment (p.8) that the "lowest standard acceptable for achieving the desired results from endhauling waste material during road construction is 17-18 feet."

Forest Service Response:

Endhauling of waste material as a mitigation measure is proposed on areas of full bench road construction in the North Revilla Project Area. Examples diagramed and sited in Mr. Mitchell's report pertain to cut and fill slope road construction. The intent of full bench road construction and end haul of waste as a mitigation measure is to avoid the situations described in Photos 1-4 of Mr. Mitchell's report. Full bench road construction places the entire 14-foot road on stable bedrock. "Sliver fills," as described in Mr. Mitchell's diagrams, are poor construction practice and are not utilized in this plan.

While a 14-foot running surface (road prism) is the design criteria for specified road construction in this plan, adequate operating room for required equipment will be provided by a 75-foot right-of-way clearing, cutslope clearing limit, and roadside drainage structure.

Issue 3: Recreation and Scenic Quality

Issue 3A: Maintain or expand roaded recreation opportunities.

Letters and Comments on this Subject Include:

001-019, 021-090, 092-095, 097-168, 170-233, 236-239, 241-257, 259-291, 293-307, 309-317, 319-331, 333-339, 341, 343-358, 360-412, 414-489, 491-523, 525-563, 565-599, 601-639, 641-647, 649-661, 663, 664, 666-723, 725, 731, 735-743, 745, 747- 753, 764, 771, 773-775, 783, 785, 787-824, 826-832, 852, 859, 866, 869, 871, KS1, SS1

Examples Included:

Roads should, wherever possible, be planned and built where they will most benefit future roaded recreation and be planned so as to connect with or be used in conjunction with the future Transportation and Utility Corridor. #731

I believe the area could be made more accessible to ALL the people of Ketchikan not just the elite few who can afford to own or charter an aircraft or boat to access the area. #747

Considering the financial outlook for the State for road maintenance and new construction, it is ludicrous to consider providing road access from Ketchikan northward to provide dubious recreation opportunities within the foreseeable future. #785

Forest Service Response:

Connection of the North Revilla Project Area roads with the rest of the island's road network is beyond the scope of this project. Forest plan direction for the Project Area is to provide Forest visitors with a range of recreation opportunities consistent with public demand, with emphasis on recreation places identified as being popular with local users or important to the tourism industry. Generally, these can best be utilized by developing and managing access opportunities that support a variety of resource management objectives. Implementation of any of the action alternatives does not preclude any future roaded recreation opportunities for the residents of Revilla Island.

Issue 3B: Timber harvest activities affect recreational experiences.

Letters and Comments on this Subject Include:

41, 91, 215, 413, 733, 764, 770, 767, 769, 770, 774, 776, 857, 859, KS1, KS3, KS8

Examples Include:

I don't care to recreate in a clearcut. #91

Don't harvest in Traitors Cove due to its recreation value. #733

Much of the recreation on Revilla Island is done by people who work in the timber industry. It is unnecessary to protect the "viewsheds" for people who are doing the timber harvest and the areas that are "viewsheds" from the roads built by the industry to access timber harvest areas should not be constrained by visual concerns. There are ample areas in and around Revilla Island for remote wilderness experience that have undisturbed "viewsheds". #859

This area is frequented by sportfishermen, hunters, photographers, kayakers, etc. These are people who come here to enjoy the wilderness and recreate. Clearcutting and making a patchwork of this forest is not conducive to this kind of industry. #770

Forest Service Response:

The Forest Service seeks to balance the commodity and non-commodity uses of the Forest resources through the Forest Plan land-use allocation process. Because of this, timber harvest activities may or may not affect a Forest visitor's recreational experience. To a local Ketchikan resident in need of more recreational opportunities, timber harvests may mean a positive opportunity; to the occasional Forest visitor, timber harvest may not appeal to their expectations.

Issue 3C: No additional wilderness or recreational land-use designations should be made.

Letters and Comments on this Subject Include:

130, 255, 689, 729, 732, 855, 859, SS1

Examples Included:

Through Tongass legislation there is enough wilderness to satisfy any environmental group. #255

Our clients especially enjoy taking the hike up the trail from the salt water to Orchard Lake. I would like to be assured that the lake and its drainage be left in its pristine condition. #732

The Alaska Forest Association (AFA) objects to the North Revilla DEIS because it contemplates creating a new wilderness area...(in) that Roadless Area 526 "meets the criteria to become considered for recommendation as a wilderness area... (Page 261, Chapter 3). #855

Forest Service Response:

Extensive public comments regarding additional wilderness designations were received in the initial scoping and in response to the North Revilla DEIS. No additional wilderness or other non-harvest land allocations are contemplated within the North Revilla Project Area. This is a Forest Plan decision and is outside the scope of this project.

TLMP Revision SDEIS's Alternative P proposes designating a large portion of the Orchard Creek and Lake drainage to a Semi-Primitive Recreation land-use prescription and the North Revilla environmental analysis is consistent with this designation. This designation allows primarily small scale, rustic recreation facilities such as trails, recreation cabins (existing), shelters, docks, and off-highway vehicle roads.

For further information, see the "Roadless Areas " section of Chapter 3, and the response to Issue 6K/1.

Issue 3D: Logging affects scenic quality along North Behm Canal, Neets Bay, Gedney Pass and Hassler Pass.

Letters and Comments on this Subject Include:

259, 369, 767, 769, 776, 782, 850, 851, 853, 856, 859, 860, 861, 868, 871, KS1

Examples Included:

Yes Bay Lodge is against the proposed logging of the North Behm Canal, Hassler Island in particular. Presently we are able to provide a scenic outdoor adventure and with the declining fish stocks and limits, we are forced to rely on the scenic beauty of the area to provide this experience. #767

We support harvest of timber on Hassler Island, however, some judgement needs to be used to reduce visual sensitivity. #782

Visual impacts should be kept to an absolute mininum in all cases. In addition to recreation and charter fishing, there is an increasing use of Behm Canal by sightseeing tours. These viewsheds should receive maximum protection when considering any clearcutting plan. #860

We urge you to use moderation in the final unit layout for Hassler Island. While we favor the use of the project area for some timber harvest, we recognize the high recreation use of Gedney and Hassler Passes. The layouts in Alternative 6 do not appear to result in a serious visual impact from the water. #868

Forest Service Response:

Forest plan direction for the Project Area in regards to the visual resource is to provide Forest visitors (local residents and tourists) with visually appealing scenery, with emphasis on those landscapes seen from saltwater use areas and small boat routes like Behm Canal, Neets Bay, Gedney and Hassler Pass.

The management intent for these saltwater viewsheds from the Forest Plan is to reduce the apparent visual impact of timber harvest on steep and evenly-vegetated landforms along Behm Canal, Hassler Island in particular.

Within the saltwater bays adjacent to Behm Canal, the landscape will be managed for a combination of commodity output and amenity-oriented activities. These landscapes (within the proposed Scenic Viewshed and Modified Landscape LUD's) will have a modified but still basically "natural" appearance. Over time, all suitable National Forest System lands on Revilla and Hassler Islands will be harvested.

Issue 3E: Logging activity noise levels affects recreational experiences

Letters and Comments on this Subject Include:

#863

Examples Included:

The level and character of noise that would be expected from helicopter operations in the vicinity should be described. For example: Forest Service recreation cabins at Blind Pass, Plenty Cutthroat, and Orchard Lake (page 3-11). Helicopters at 500 feet are comparable to sound levels of heavy trucks and city buses heard from the street. #863

Forest Service Response:

We are aware of the potential noise impacts on recreational activities at the Project Area's cabin locations. However, there are no proposed helicopter harvest units closer than one and a quarter miles to either the Blind Pass cabin (Unit 5536 in Alternative 6) or to the recreation cabins on Orchard Lake (Unit 3010 in Alternatives 2, 4, and 6). The time and duration of this noise will be very limited at these sites. The mountainous terrain, distance, and short duration of the helicopter yarding will negate any significant noise impacts to forest users.

The logging noise effects on the Recreational Opportunity System (ROS) classifications at specific recreation places are discussed in Chapter 3, Recreation section.

Issue 4: Wildlife

Issue 4A: Decline in wildlife populations/habitats

Letters and Comments on this Subject Include:

729, 731, 732, 740, 741, 750, 756, 772, 778, 850, 853, 859, 867, 873, KS1, KS3, KS4, KS6, KS7, SS2,

Examples Included:

The cumulative impacts of prior extensive harvest on North Revilla have reduced the habitat capability significantly. #853

This harvest plan reduces necessary subsistence wildlife habitat too much. #478

Forest Service Response:

Wildlife populations, as projected by habitat capability models, will decrease as a result of past, current, and future timber harvest. Habitat capabilities are projected to decline for Management Indicator Species such as black-tailed deer, marten, red squirrel, hairy woodpecker, brown creeper, and Vancouver Canada goose. See the Wildlife Section in Chapter 3.

Issue 4B, 4D and 4X: Fragmentation of the old growth forest and connectivity of the remaining patches

Letters and Comments on this Subject Include:

731, 732, 733, 744, 762, 773, 774, 779, 853, 854, 859, 867, 873, 875, KS1, KS2, KS4, KS6, KS7, SS1, SS7, SS8,

Examples Included:

Protect remaining old growth in the area. #733

How do you propose to link patches and corridors. #853

I am glad to see that the Forest Service recognizes that there are extremely large blocks of old growth areas adjacent to the project area. It is good that the Forest Service has examined the effect on timber harvest of forest fragmentation in the project area, but I do not think this is a concern because of those huge blocks of already set-aside old growth timber. #859

Forest Service Response:

The connectivity of remaining patches of old growth forest is discussed in the Biodiversity section, and the effects of fragmentation are discussed in the Wildlife section. The remaining patches of old growth and the connections between them are mapped in Chapter 3, Biodiversity section.

Issue 4C: Clearcuts are good for deer hunting and wildlife

Letters and Comments on this Subject Include:

730, 739, 762, 859, SS1.

Examples Included:

Deer, bear,and other animals are in better shape all year around due to logging, more feed per acre on logged land. #739

Forest Service Response:

The quantity of available forage is greater shortly after an area is harvested. As the second growth canopy closes, the quantity of available forage decreases as the understory is shaded out. Clearcut areas do not provide suitable winter habitat for deer because the vegetation becomes snow covered and unavailable to deer, and lacks thermal protection.

Issue 4E: Biological Assessment not available for review

Letters and Comments on this Subject Include:

774, 777, KS1, KS7

Examples Included:

I was not able to review Appendix D, the Biological Assessment, it was not included in the DEIS. #774

Forest Service Response:

Unfortunately the Biological Assessment wasn't available when the Revilla DEIS was sent to the printer; it was under going internal review. The Biological Assessment is in Appendix D of the FEIS.

Issue 4F: Harvest data not accurate

Letters and Comments on this Subject Include:

774, 776, 777, 778, SS3.

Examples Included:

Table 3-107 states that 3 marten were taken in 1992. There were over 50 marten trapped by Neets Bay residents in 1992. Table 3-104 states that the average deer harvest by the Neets Bay community from 1987-1991 was 1 deer. In 1991 there were at least 10 deer taken. #777

Forest Service Response:

ADF&G deer harvest data for 1991 does not show any harvest by Neets Bay residents. According to ADF&G, all residents in communities with fewer than 2,500 people who purchased licenses should have received a questionnaire; it is possible that Neets Bay residents either didn't receive or didn't return the questionnaire, which would account for the lack of data. As far as the marten harvest, a data processing error occurred when retrieving the marten harvest data. In fact, there was a harvest level in 1991/92 that is closer to the respondent's observations. This information has been corrected for the FEIS.

Issue 4G and 4H: More discussion of effects on mountain goats, bats and flying squirrels

Letters and Comments on this Subject Include:

776, 853, KS4, KS7, SS7

Examples Included:

Some time ago mountain goats were released on the island...you failed to disclose that fact and how cutting will impact the replanted goats. I hear there are flying squirrels there...The bats are around also and you don't talk about them. #776

Forest Service Response:

Although mountain goats have been released on Revilla Island, they were not included as a Management Indicator Species for the North Revilla Project because none are known to be in the Project Area and the goat habitat is of poor qualilty (lack of cliffs for escape cover). According to ADF&G, there is a possibility that this poor goat habitat could be utilized at some time in the future. Application of the Management Indicator Species (MIS) concept offers land managers the opportunity to analyze the impacts to a manageable number of species that collectively represents the complex of habitats, species and associated management concerns. Hairy woodpeckers represent snag and cavity dependant species, such as flying squirrels and bats.

Issue 4I: Wildlife habitat capability models are flawed

Letters and Comments on this Subject Include:

778, 853, 854, 858, 859, KS1, KS7, SS7.

Examples Included:

In the bear habitat model they look at-they're basing this on a lot of speculation. #SS7

I do not know what deer population model you used for your analysis of the impacts to deer habitat. If it is the one that has been developed with the State of Alaska, it has a great many limitations and flaws. #859

Forest Service Response:

All habitat capability models were developed by a group of State and Federal biologists, including biologists from Alaska Department of Fish and Game, USDA Forest Service and USDI Fish and

Wildlife Service. The models are used to estimate long-term habitat changes. They cannot be used to estimate the current or future populations, as discussed in Chapter 3 of this document. However, these are the best models available for the Tongass National Forest, and are continually being re-evaluated and updated. If field verification indicates the need to adjust the models, such adjustments will be made. This type of validation monitoring is usually carried out at the Regional level.

Issue 4J: Sea lion haulout rock on Nose Point (north of Neets Bay)

Letters and Comments on this Subject Include:

850.

Examples Included:

A sea lion haulout rock on Nose Point wasn't mentioned. #850

Forest Service Response:

We have no prior information that there is a haulout site at Nose Point. The site will be investigated.

Issue 4K: Wildlife islands are not effective mitigation for wildlife

Letters and Comments on this Subject Include:

853, KS4, SS8

Examples Included:

Wildlife islands described in this document are not effective mitigative measures for wildlife. #853

Forest Service Response:

The purpose of leaving wildlife islands within large clearcuts is to provide a better distribution of snags and future snags for cavity dependent species; and to provide another source of vascular plants to regenerate the harvest site, other than from the edges. Green tree patches in large clearcuts have been recommended by Samson et al., "New Perspectives in Alaska Forest Management," at the 1991 North American Wildlife Conference in Edmonton, Alberta, Canada.

Issue 4L: Precommercial thinning and grass seeding not effective mitigation for wildlife-use timber or soils funds

Letters and Comments on this Subject Include:

853, 867, 873, 875, KS4, SS8

Examples Included:

Although thinning is a good silvicultrual practice that allows the Forest Service to set timber harvest levels at a higher Annual Sale Quanity (ASQ), the contentions that thinning is an effective wildlife mitigation measure cannot be supported at this time. #873

As in the case of precommercial thinning, no evidence is presented that seeding will significantly benefit wildlife. #873

Forest Service Response:

Only standard spaced thinning has been studied so far, and it is true that this type of thinning may not be benefical strictly with regards to wildlife. The Forest Service has done some experimental variable spaced thinning to better mimic natural conditions. This may have some potential merits for wildlife. Roadsides with a mixture of clover have received heavy grazing by deer. Clover has a high available protein content, and also adds nitrogen to the soil. There are other benefits, such as roadbed stablization, and delaying the conversion to alder.

Issue 4M: Road densities are too high-need more analysis

Letters and Comments on this Subject Include:

853, 873, 875, KS1, KS4, SS8

Examples Included:

The DEIS does not address the effects of roading on wildlife...Road densities appear excessively high and significant reduction is recommended. #853

Forest Service Response:

The effects of roading on wildlife is covered in the FEIS-Chapter 3, Wildlife Section under Cumulative Effects–Marten, Black Bear, and Gray Wolf. Open road densities were considered when developing the Road Management Objectives for all the roads in the Project Area. Road building is minimized to the extent possible in alternative design.

Issue 4O: Goshawk sightings and surveys

Letters and Comments on this Subject Include:

853, 873, 875, KS1, KS4

Examples Included:

There are documented goshawk sightings within the project area...what has been surveyed and to what level? Why were the sightings not part of the document? #853

Forest Service Response:

Goshawk sightings and surveys were discussed in the DEIS, in the TES section page 108. For a more in depth discussion of goshawks and surveys, see the Biological Assessment in Appendix D.

Issue 4P: What are the impacts to marbled murrelets, harlequin ducks, marine mammals, and rare plants; what surveys have been done and what mitigation measures are used.

Letters and Comments on this Subject Include:

853, 860, 867, 873, 875, KS1, KS4

Examples Included:

#853 had four separate paragraphs asking for information on impacts, surveys and mitigation measures for marbled murrelets, harlequin ducks, marine mammals, and rare plants.

At this time we do not conclusively know that a 30 acre buffer around a marbled murrelet nest is sufficient to protect and maintain the use of an area by marbled murrelets. #867

Forest Service Response:

Impacts and surveys that have been done are discussed in the Biological Assessment in Appendix D. Mitigation measures to be applied as a result of the project are shown in Chapter 2. Current Forest Standards and Guidelines, in addition to these mitigation measures are considered adequate to maintain the neccessary habitat for these species. The intent of the 30-acre buffer around marbled murrelet nests is to protect the nest site for reseach if a nest is discovered, not to mitigate any impacts on marbled murrelets. The Biological Assessment concluded that there may be impacts to marbled murrelets as a result of harvesting nesting habitat.

Issue 4Q: The two new LTF's in Traitors Cove will significantly affect wildlife and shellfish.

Letters and Comments on this Subject Include:

854, 873, 875, KS1, KS4.

Examples Included:

The Tongass Conservation Society is strongly opposed to the two new transfer sites planned for Traitors Cove, No. 18 and 22 are considerable high value marine habitat #853

Forest Service Response:

Field recon has located alternative road connections to the LTF in Southwest Neets Bay. Both proposed LTF construction sites in Traitors Cove have been dropped from consideration for the Final EIS. See response to Issues 7B and 7C.

Issue 4S: Brown Creepers are not abundant and have declined drastically

Letters and Comments on this Subject Include:

853, KS1, SS5

Examples Included:

I called some top birders in Ketchikan, and they indicated to me that brown creepers were uncommon. And when I looked it up in Bob Armstrong's book, "Birds of Alaska," he listed it as uncommon as well. #KS1

Forest Service Response:

The EIS acknowledges that the brown creeper habitat capability will be declining in the Project Area. Richard M. DeGraaf et al., in *Forest and Rangeland Birds of the United States-Natural History and Habitat Use*, describes the status of the brown creeper as "inconspicious, but locally common," and describes the breeding range as "from southwestern, central and southeast Alaska, central Alberta, central Manitoba, and Newfoundland south to southern California, across to extreme western Texas, southeastern Nebraska, southeastern Missouri, southern Ontario, eastern Ohio, and West Virginia; in the Applachians to eastern Tennessee and western North Carolina; and to the lowlands of Virginia, Maryland and Delaware. Breeds also through Mexico into Central America."

Issue 4R and 4T: Old Growth Retention

Letters and Comments on this Subject Include:

854, 858, 859, 867, 873, 875, KS4.

Examples Included:

There is no wildlife retention proposed in this plan, although agency recommendations based on the current TLMP state that 2,700 acres of retention should be set aside within the project area's VCUs. #854

Forest Service Response:

An excess of 7,200 acres of Wildlife Old Growth Retention has been identified and mapped for the Final EIS. In addition to the area in Orchard Lake that has been designated as Semi-primitive Recreation in Alternative P in the Supplement to the TLMP Revision, another large block in Traitors Cove has been designated as "Areas that will be managed to provide old growth habitat conditions" for this planning period in Alternatives 4, 5 and 6. See the Biodiversity Section in Chapter 3 for more information.

Issue 4U: Wildlife island or snag patch locations

Letters and Comments on this Subject Include:

858.

Examples Included:

Any leave islands or snag patches called for in a unit should be flexible in location and shape so as to minimize effects of safety and logging feasibility. #858

Forest Service Response:

Individual unit cards carry site-specific mitigation measures. The guidelines for location of wildlife islands and snag patches are flexible to allow for safe timber harvest (see Chapter 2 Mitigation Measures).

Issue 4V: Add wolf as MIS

Letters and Comments on this Subject Include:

854, KS4.

Examples Included:

Wolves should be a management indicator species...wolves will also be subjected to trapping pressure depending on where you harvest and put roads. #KS4

Forest Service Response:

Wolves have been added to the Final EIS as a MIS.

Issue 4W: Goshawk mangement procedures are vague

Letters and Comments on this Subject Include:

858, 859, 867.

Examples Included:

Goshawk mangement areas should be treated as a true management area. They should not be set aside as quasi-wilderness, limited activity areas. The discussion in this DEIS is vague on what procedures might be followed. #858

Forest Service Response:

Interim Guidelines for goshawk habitat management have been recommended by the Alaska Regional Forester on, August 18, 1992. These interim guidelines will be followed unless new revised guidelines are issued. These guidelines apply to areas with known goshawk nests. Although there have been several sightings of goshawks in the North Revilla Project Area, no nests have been found. If a goshawk nest is found during unit layout, the unit will be modified or dropped to conform to the guidelines.

Issue 4N and 4Y: What are the mitigation measures for bald eagles i.e. Hassler Island LTF and LTF site #18.

Letters and Comments on this Subject Include:

853, 867, 873, KS4.

Examples Included:

A nest is located close to LTF No. 18 and near the LTF on Hassler Island...what is the mitigation for the bald eagle? #853

Forest Service Response:

The Forest Service and the US Fish and Wildlife Service have an Interagency Agreement for the protection of bald eagle habitat. Normally a 330-foot buffer is maintained around all eagle nests. Whenever encroachment within the 330-foot buffer is unavoidable, a variance is requested from the US Fish and Wildlife Service. Generally blasting is restricted within 1/2 mile of active eagle nests during the period of March 1 to May 31. The LTF site #18 has been dropped from consideration. The Hassler Island LTF is located outside of the 330-foot buffer zone of a nearby eagle nest tree. Also another eagle nest (#42) was discovered by a recent survey, one mile north of the existing LTF on Hassler Island. This site will require a variance, since the road will be located within 330 feet and there is not another alternative location for the proposed road.

Issue 4Z: Misty Fiords Wilderness does not necessarily supply quality wildlife habitat required by old-growth dependent species

Letters and Comments on this Subject Include:

867, 873, 875.

Examples Included:

The document repeatedly refers to Misty Fjords as having large or large contiguous blocks of old-growth (pg. 1-8, photo caption, pg. 3-95, table 3-47). While this timber may be old, it is not all high quality habitat. Elsewhere, the DEIS describes this habitat as "in a natural state." DFG believes that this is a more appropriate description of its character. The DEIS seems to imply that because large natural areas are nearby, the habitat requirements of wildlife species is assured. #873

The FEIS text has been reviewed with your comments in mind, and where the term "natural state" is more accurate, it has been used instead of large blocks of old growth.

Issue 4AA: Correct marbled murrelet population estimate for Southeast Alaska

Letters and Comments on this Subject Include:

867.

Examples Included:

Chapter 3, page 107, Marbled Murrelet... Kessell and Gibson 1978, reported 250,000 marbled murrelets in Prince William Sound, not Southeast Alaska. It was J.W. Nelson and W. A. Lehnhausen (1983) that reported 250,000 for Southeast Alaska. Data are not sufficient to substantiate the 250,000 population. #867

Forest Service Response:

Kessell and Gibson (1978) reported 250,000 marbled murrelets in Prince William Sound and Southeast Alaska. The FEIS states a range of population estimates in Southeast Alaska and acknowledges the need for a statistically valid estimate.

Issue 4BB: Compare ADF&G Deer Population Objectives to habitat capabilities resulting from the proposed project.

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

DFG is concerned that DFG deer population objectives were not presented in the DEIS. The State is on record in stating that "...the deer population objectives and the habitat capability model are only advisory tools for management decisions and not minimum mandatory standards." #873

Forest Service Response:

ADF&G deer population objectives have been described and displayed in greater detail in the FEIS, see Chapter 3 Wildlife section.

Issue 4CC: More clearly explain the effects of logging on deer

Letters and Comments on this Subject Include:

873, 875

Examples Included:

The DEIS should more clearly explain the potential effects of logging on deer populations. We suggest the following addition on page 3-73, first paragraph, immediately before the last sentence: "In most cases, timber harvest of deer winter range reduces the long term quality... The amount of second growth and winter severity are key factors in determining the capability of the land to support deer populations." #873

Forest Service Response:

This proposed text has beeen added to Chapter 3 - Wildlife section.

Issue 4DD: Patch Size Effectiveness Maps-differentiate the blocks that are greater than 1,000 acres

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

DFG would prefer larger maps for better readability and use of cross-hatching to differentiate the various types of blocks by size (those greater than 1,000 acres vs. those smaller than 1,000 acres). #873

Forest Service Response:

The blocks greater than 1,000 acres have been shaded darker than the blocks less than 1,000 acres.

Issue 4EE: Sustainable harvest rate for otter should be 20 percent

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

The appropriate sustainable harvest rate for otters is 20% not 40%. #873

Forest Service Response:

The 20% harvest rate for otter has been used in the FEIS.

Issue 4FF: Need more baseline data and wildlife surveys

Letters and Comments on this Subject Include:

873, 875, KS4, KS7, SS8.

Examples Included:

The DEIS lacks important baseline data for making accurate biological impact assessments and does not commit to a wildlife population monitoring program to test or validate the assumptions projected by proposed activities...In addition to management indicator species, surveys and population monitoring should be considered for marbled murrelets, goshawks, wolves, and Vancouver Canada goose. #873

Forest Service Response:

It is not economically feasible or practical to monitor all wildlife populations on a project-by-project basis. Wildlife observations in the Project Area have not shown any evidence of being significantly different from modeled expectations. Validation of habitat capability models is conducted at the Forest level.

Issue 4GG: Muskegs and second growth are not viable corridors.

Letters and Comments on this Subject Include:

873, 875, KS1, KS4.

Examples Included:

DFG disagrees with inclusion of muskegs and second growth stands as part of the connectivity of habitats in the project...The Bluff Lake/Neets Creek "second-growth corridor"...should be evaluated in the FEIS. #873

Forest Service Response:

Dispersal corridors containing muskegs and second growth stands can be utilized by deer, marten, and other animals and plants. As the percentage of muskeg and second growth increases, the effectiveness of the corridor may decrease. Actual dispersal corridors have been identified in the FEIS. Some silvicultural treatments, such as thinning, have been proposed to improve affected corridors, such as the corridor through the Bluff Lakes area. See the Biodiversity section in Chapter 3 for more information.

Issue 4HH: Deer pellet surveys are part of the deer model and are very inaccurate

Letters and Comments on this Subject Include:

SS7.

Examples Included:

Habitat capability models, some of these are based on pellet surveys...I think these studies are a lot of crap. #SS7

Forest Service Response:

Deer pellet surveys have nothing at all to do with the deer habitat capability model. Data from deer pellets surveys are used by ADF&G as a population index. Generally, deer populations fluctuate over time (more deer pellet groups per plot this year than other years indicates the deer population is probably higher; fewer deer pellet groups per plot than other years, the population is probably lower).

Issue 4II: Include discussion of the viable population committee

Letters and Comments on this Subject Include:

853, 854, 867, 873, 875, KS1

Examples Included:

The work of the Interagency Viable Population Committee was not mentioned or analyzed #853

Forest Service Response:

The strategy developed by the Interagency Viable Population Committee was utilized for the FEIS. It was a result of using that strategy and project level (site-specific) analysis that old-growth retention was mapped in Traitors Cove and Orchard Lake. See the Record of Decision (ROD) Map.

Issue 4JJ. Unit specific comments on the North Revilla DEIS.

Comments Include:

Listed below are units, by area, ADF&G recommends deleting from a Record of Decision in the next North Revilla operating period. This would have benefits to wildlife, although they would last only for so long as the units left uncut remain as old-growth. This alternative still provides for more than than the target volume of 200 mmbf. #873, 875.

Forest Service Response:

The 81 individual units recommended for deletion by ADF&G, are all concentrated within the Traitors Cove to Traitors Creek portion of the Project Area. The reason listed by ADF&G for

wanting to delete the units was to emphasize wildlife habitat values associated with Traitors Creek. After careful consideration, the ID Team decided to modify Alternative 4 (emphasize wildlife and subsistence values) to address these concerns. All of the units listed by ADF&G, both priority one and two, have been dropped from Alternative 4, except for unit #9104. Unit #9104 is located on the south side of Traitor's Cove just inside the salt chuck. The road system required to access units #9067 and #8065, passes through unit #9104. Without the volume (2917 mbf) from unit #9104, units #9067 and #8065 would be grossly uneconomical due to the limited volume and high road costs involved. All other unit deletions requested by ADF&G were deemed to be appropriate within the context which they were made. The IDT adopted them as such in alternative 4. ADF&G's key areas coincided with many of the key subsistence areas (as identified in a meeting with Saxman native community representatives 2/93, including William Kushnick, Matilda Kushnick and Thomas Abbott). The remaining alternatives (2,3,5, and 6) were not modified to such a degree, in order that they might continue to address the full range of public issues and concerns.

Issue 5: Subsistence

Issue 5A, 5B, 5E, and 5F: Traitors Cove, Neets Bay, Margaret Creek and Lake, Klu and Shrimp Bay are all important subsistence areas.

Letters and Comments on this Subject Include:

733, 774, 776, 777, 778, 779, 853, 854, 873, KS1, KS2, KS4, KS7, KS8, SS4, SS7, SS8.

Examples Included:

The drainage areas of Traitors Creek should be avoided for bear, deer, and fish habitat. This area is a prime subsistence area today and in the past...The Margaret Creek and Lake area should be avioded because of the same consideration...The large units in Klu and Shrimp Bay should be avoided. This area is a prime subsistence area both now and in the past. #778

Forest Service Response:

Though the use of the TRUCS data, ADF&G harvest data, Subsistence Hearings held in Ketchikan and Saxman, and meeting with Saxman community members to determine important subsistence use areas, the Forest Service agrees that these are important subsistence use areas. Development of the alternatives and road management objectives have taken this information into consideration.

Issue 5C: Harvest timber somewhere else because of impacts to subsistence

Letters and Comments on this Subject Include:

774, 777, 778, 854, 872, KS7, SS3, SS4, SS5, SS7, SS8, SS10,

Examples Included:

The North Revilla plan goes against the assurances ANILCA sets up to protect subsistence priority. The Forest Service should go someplace else to harvest timber, because this plan will have a significant impact on subsistence users around the Ketchikan area. #778

Forest Service Response:

The North Revilla Project does not change the priority allocation of fish and game to rural community residents. Based on a review of available harvest volumes for each VCU in the area affected by the KPC contract, it appears that in order to meet contract volume commitments, most of the LUD III and IV VCU's would need some level of harvest prior to the end of the KPC contract in 2004. Harvest of other areas at this time may decrease the impacts on subsistence users in the North Revilla Project Area but would be likely to increase effects on subsistence users in those other areas.

Issue 5D: TRUCS data not accurate

Letters and Comments on this Subject Include:

776, 778, SS3, SS4, SS7.

Examples Included:

Overall the TRUCS data and the Alaska State Department of Fish and Game data is not reliable. #778

Forest Service Response:

Subsistence hearings were conducted in Ketchikan and Saxman to ensure that North Revilla analysis was preformed using the best information available. At the subsistence hearings it was noted that there may be some discrepancies between ADF&G harvest data compared to the actual harvest numbers. Apparently, Saxman residents were not reporting their harvest information. So a special meeting was held with Saxman residents to determine important subsistence use areas. Although the TRUCS was done in 1987-88, the information is continuously supplemented with ADF&G harvest data, and additional surveys by ADF&G Subsistence Division.

Issue 5G: Hassler Island is an important subsistence fishing area

Letters and Comments on this Subject Include:

778, SS5

Examples Included:

The amount of activity on the small Island of Hassler would have a devastating impact on the fish habitat in that area. Avoid Hassler Island it is a important subsistence fishing area. #778

Forest Service Response:

Best management Practices and stream buffers will protect stream productivity, therefore no significant impacts to the fishieries are anticipated.

Issue 5H: No subsistence alternative

Letters and Comments on this Subject Include:

778, SS7.

Examples Included:

The Forest Service must come up with a subsistence alternative and be willing to amend the alternative. #778

Forest Service Response:

It is not necessary to develop an alternative for each issue identified as long as the issue is addressed within one or more alternatives. Alternatives 4 and 6 are designed to address the subsistence issue.

Issue 5I: All action alternatives will negatively affect my subsistence life style.

Letters and Comments on this Subject Include:

779, 872, KS1, SS5, SS10.

Examples Included:

All of the action alternatives will negatively affect areas where I recreate and harvest berries and plants and my opportunity to use these areas. Wildlife and wild plant harvest plays a big part in my lifestyle and diet... #779

Forest Service Response:

Timber harvest will have effects on the environment, which are displayed in Chapter 3 of the FEIS. Subsistence hearings and comments on the Draft EIS are used to try and avoid important subsistence use areas. Forest Standards and Guidelines, mitigation measures and design of the preferred alternative will minimize those effects. (see also response to 5c.)

Issue 5J: Inadequate information on subsistence use of the project area

Letters and Comments on this Subject Include:

854, 872, KS4, KS7, SS3, SS4, SS5, SS6, SS7, SS8

Examples Included:

The Saxman IRA Council, on behalf of the Organized Village of Saxman, finds the present subsistence information inaccurate and...extra effort and planning must be made in order to reach subsistence users that need special attention due to cultural diversity and sensitivity... #872

Forest Service Response:

As stated in Response 5D, the reason for holding subsistence hearings is to make every reasonable attempt to use the best available information. As a result of testimony at the Saxman Subsistence Hearing, the Forest Service has met with individuals representing the community of Saxman in order to obtain better information on the areas that are important for subsistence use within the Project Area. The results of that meeting were used to modify Alternatives 4 and 6.

Issue 5K: Don't connect the Margaret Lake road to Traitors, it will increase competition from people at the camp.

Letters and Comments on this Subject Include:

853, 854, 875, KS4.

Examples Included:

The DEIS states that "road management will take subsistence into consideration." How? In my judgement the most important way is by not connecting the Margaret Lake road to Traitors. To do so will cause considerable increase in competition for subsistence resources from camp dwellers. #854

Forest Service Response:

The road tie between Margaret Lake and Traitors is not proposed for the preferred alternative. See response to Issue 1P.

Issue 5L: Disagree with the statement "No impact to subsistence because no beach fringe is proposed for harvest"

Letters and Comments on this Subject Include:

854.

Examples Included:

The DEIS states there will be no impacts to subsistence in part because no beach fringe will be cut. #854

Forest Service Response:

The DEIS stated that "Effort was taken to protect the highest value subsistence areas. For example, beach fringe is one of the highest use subsistence areas and none will be harvested under any of the proposed alternatives."

Issue 5M, 5V and 5X: Native clans still use traditional areas that have been used for hundreds of years.

Letters and Comments on this Subject Include:

872, KS4, KS7, SS5, SS6, SS7.

Examples Included:

There's old reports like the Goldsmith and Haas reports. It has maps. It has the Indian names...If they had looked at that, they might have a clue to where the wildlife is...There's another report called the Waterman reports. This has Tlingit places names for all of that particular area. #SS7

Forest Service Response:

These reports have been utilized for both the DEIS and the FEIS. A map of the native place names has been added to the FEIS.

Issue 5N: Identify the mitigation measures necessary to maintain human access to shrimp, crabs and sea cucumbers

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

The FEIS should maintain unobstructed access to important subsistence and recreational resources. The FEIS should identify mitigation necessary to maintain human access to shrimp, crab and sea cucumbers #873

Forest Service Response:

With the dropping of the proposed LTF's in Traitors Cove, a majority of the potential conflicts have been eliminated (see issue 7X).

Issue 5O: Page 224 "Alt. 2 through 6 will not represent a significant possibility of a significant restriction on subsistence use of deer and certain furbeareres" conflicts with other statements

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

Page 224 *"Alt. 2 through 6 will not represent a significant possibility of a significant restriction on subsistence use of deer and certain furbeareres" conflicts with other statements.* #873

Forest Service Response:

The action alternatives in and of themselves do not cause a significant possibility of a significant restriction of subsistence use. With continued habitat capability decline from past, proposed and future timber harvest, at some point in the future, the use of deer and marten may become restricted.

Issue 5P: Analyze deer hunting patterns on a WAA and community basis, not just the project area

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

The EIS should should describe and analyze the total subsistence hunting patterns of the affected communities. It is not acceptable to limit discussion only to the project area #873

Forest Service Response:

The subsistence section did analyze areas outside of the Project Area (see page 67 of Chapter 3 - DEIS to compare Project Area to the total area of WAA's 509 and 510). The Subsistence section has been expanded to include an analysis of Revilla Island and Prince of Wales Island.

Issue 5Q: Discuss deer habitat capability changes in the years 1954, 1990, 2010 and 2040.

Letters and Comments on this Subject Include:

873, 875.

Examples Included:

Discuss deer habitat capability changes in the years 1954, 1990, 2010 and 2040. #873

Forest Service Response:

The deer habitat capability for the project area is shown in Chapter 3-Wildlife Section, for the years 1954, 1993, 1997, 2004, 2040, and 2140. The 1993, 1997, and 2004 dates were selected because 1993 represents the existing condition, 1997 represents the end of the direct impacts, and 2004 is the end of the KPC contract period and best represents the reasonably foreseeable or indirect cumulative effects date.

Issue 5R: Project a future increase in demand for deer.

Letters and Comments on this Subject Include:

734, 873, 875.

Examples Included:

The DEIS incorrectly assumes that subsistence demand will not increase over time...The DEIS should follow the SE Chichagoff FEIS which includes a model for projecting deer demand (Present and future harvest) verse supply (10% of habitat capability) over the next fifty years. #873

Forest Service Response:

Future demand for deer is shown in the FEIS as increased from current demand. Department of Labor statistics indicate a 1.69 to 1.84 percent increase in population per year for Southeast

Alaska to the year 2000. The FEIS used a 1.8 percent annual increase in demand for deer though the year 2000, and a 1.5 percent annual increase in demand after 2000.

Issue 5S: Analyze overall cumulative forest wide effects of logging

Letters and Comments on this Subject Include:

873, 875, SS5, SS7

Examples Included:

Analyze overall cumulative forest wide effects of logging. #873

Forest Service Response:

This is a forest planning question and is beyond the scope of this analysis. Forest wide cumulative effects analysis has been done in the existing Forest Plan and has been updated in the Supplement to the Revised Tongass Land Management Plan.

Issue 5T: Display mapped analysis of deer supply vs. demand over the next 50 years

Letters and Comments on this Subject Include:

873, 875, KS7, SS7

Examples Included:

Display mapped analysis of deer supply vs. demand over the next 50 years. #873

Forest Service Response:

Mapped analysis of deer supply vs. demand over the next 50 years is displayed in the FEIS, Appendix J.

Issue 5U: Is the restriction on sport hunting of deer a recommendation or a possible mitigation measure?

Letters and Comments on this Subject Include:

873, 875

Examples Included:

Is the restriction on sport hunting of deer a recommendation or a possible mitigation measure? #873

Forest Service Response:

It is a possible mitigation measure to provide residents of rural communities priority use of the subsistence resource if a severe reduction in the number of deer should occur or demand greatly increases.

Issue 5W: No Native subsistence users helped to write the North Revilla draft EIS.

Letters and Comments on this Subject Include:

SS5.

Examples Included:

I don't know how long it took to put this thing together, but I'm looking for the Indian name of representation here. Where is it? #SS5

Forest Service Response:

Unfortunately, that is correct. The Forest Service is an Equal Opportunity Employer, but the IDT does not have a Native American serving in a resource capacity.

Issue 5Y: Subsistence users have priority use of the resources under ANILCA

Letters and Comments on this Subject Include:

872, SS7.

Examples Included:

Subsistence users have priority use of the resources under ANILCA. #SS7

Forest Service Response:

That is correct, ANILCA provides Alaska rural residents first priority for the harvest of fish and wildlife and other wild renewable resources on Federal public lands in Alaska.

Issue 6: Social and Economic Effects.

Issue 6A: Supply the volume needed to sustain the local mills and meet the Long-term Sale obligations.

Letters and Comments on this Subject Include:

001-019, 021-041, 044-067, 069-076, 078-090, 092-168, 170-211, 214-221, 223-257, 259-319, 321-331, 333-339, 341-368, 371-409, 412-489, 491-599, 601-628, 630-639, 641-647, 649-721, 723, 725, 743, 745, 748, 751, 753, 771, 775, 782, 787-826, 829-832, 852, 858, SS1

Examples Included:

The supply of timber available to mills in Alaska is critically short. #001-019, 021-041, 044-067, 069-076, 078-090, 092-168, 170-211, 214-221, 223-257, 259-319, 321-331, 333-339, 341-368, 371-409, 412-489, 491-599, 601-628, 630-639, 641-647, 649-721, 723, 771, 782, 787-826, 829-832

This EIS and any others in progress should be completed without further delay and the harvest plans should be implemented immediately. #725, 852

I support an alternative that supplies the volume necessary to sustain the local mills and meet the volume obligations the Forest Service has to the Long Term Sale... #001-019, 021-041, 044-067, 069-076, 078-090, 092-168, 170-211, 214-221, 223-257, 259-319, 321-331, 333-339, 341-368, 371-409, 412-489, 491-599, 601-628, 630-639, 641-647, 649-721, 723, 771, 782, 787-826, 829-832

We will be able to supply that demand and maintain operations and all benefits that go along with those operations for the communities in southern Southeast Alaska as long as a cost effective supply of timber is available to our mills. #725

The timber is essential to maintain the continuity of log supply to the local manufacturing facilities #782

Forest Service Response:

The current Tongass Land Management Plan established an allowable sale quantity (ASQ). This quantity was designed to meet market demands in Southeast Alaska, and to provide a significant contribution to Southeast Alaska's employment and local community stability while meeting multiple-use resource goals.

Information on the timber supply situation on the Ketchikan Area of the Tongass National Forest is contained in the North Revilla FEIS, Chapter 1, Purpose of and Need for Action, and Appendix A. These sections describe the timber volume needs of the KPC mill in Ketchikan, volume remaining from previous NEPA projects, and ongoing Forest Service project planning efforts.

In order to provide the volume to meet contractual commitments, each planned and ongoing EIS must be completed in a timely and expedient manner.

Issue 6B: Need a reasonable timber base to support economic stability of SE Alaska.

Letters and Comments on this Subject Include:

731, 735, 737-739, 741, 743, 746-748, 762, 764, 771, 781-783, 785, 786, 851, 852, 868-870, 875,

Examples Included:

I am very concerned that continuous depletion of the available timber base by undue consideration for extremists' views is ruining the economics and thereby effectively eliminating many otherwise commercial stands of timber from the timber base. #746

The USFS should place major emphasis on community stability and economy. #771

The economy of Ketchikan depends on the operation of the pulp mill, sawmill and related industries. #782

The timber industry has... far exceeded the sustained yield capability of the resource... industry will face severe downsizing. The best way is to downsize sooner in the case of the timber industry or else Southeastern Alaska will face a 50 year "timber drouth" concurrent with a drastic reduction of "resources other than timber" during the period due to clearcutting the Tongass National Forest. #785

Forest Service Response:

The decisions as to which areas and the amount those areas will contribute within the timber base are a result of the Forest Plan and the 10-year-sale schedules developed within the Forest Plan.

The Tongass Land Management Plan (TLMP) determines, among other things, the levels of possible resource production and management, and the availablity and suitability of lands for resource management, including timber management. TLMP data is incorporated within the North Revilla EIS, and is refined by site-specific examination during the project analysis.

Issue 6C: Need a supply of old growth for value added products.

Letters and Comments on this Subject Include:

734, 755, SS6

Examples Included:

Would the Forest Service have sacificed all of its best saw timber, usable and in demand for furniture and many specialty uses requiring knot free water resistant wood, for pulp that will no longer be needed? (authors spellings) #734

The need for good timber to manufacture houses, airplane fuselages, musical instruments, toys will increase. The good timber will have been converted to rayon and cellophane and lost. #755

Forest Service Response:

PRESENT SUPPLIES OF OLD GROWTH FROM WITHIN THE PROJECT AREA: Sawlogs from the Contract Area are currently being processed into sawtimber at mills in Ketchikan and Metlakatla. Water resistant woods (cedars) are not used in the pulping process. The demand for the dissolving pulp, usually limited to low or utility grade logs, made at the KPC facility in Ketchikan is expected to remain long into the future. Pulping provides a market for logs which can not be economically converted to lumber.

During the remaining 11 years of the KPC long-term contract, it is unlikely that other than minimal timber volume will be offered from the contract areas to independent timber purchasers (see Section B0.32 of the KPC Contract). There is potential for small salvage sales to independent timber purchasers in conjunction with KPC sale area clean-up operations. After the termination of the KPC long-term contract, it is likely that the Project Area can support some level of smaller independent timber offerings. Chapter 2 identifies the amounts of Old-Growth remaining after the proposed harvest, averaging about 50,000 acres depending on the alternative.

FUTURE SUPPLIES OF OLD GROWTH FROM WITHIN THE PROJECT AREA: The Forest Service recognizes the future need for old-growth to meet a variety of needs. It is expected these future supplies, though limited, will be available because of a variety of management perogatives, such as extended rotation areas and partial cutting. The DEIS, Table 3-62, identified the acres of old-growth remaining after these proposed entries, and identified the percent of CFL harvested by 2140, with 32 percent projected to remain, all of which could be considered old-growth.

Issue 6D: NFMA requires an economic analysis based on PNV.

Letters and Comments on this Subject Include:

853

Examples Included:

These studies [Brooks and Haynes, Irland and Gruenfield] fail to assess "demand" as a price-quantity relationship as required by the agency's NFMA planning regulations. #853

Forest Service Response:

36 CFR Section 219.12(e)(3) which you cite is part of the analysis of the management situation required for forest planning. The timber demand studies which you request are clearly a forest planning question and beyond the scope of this site-specific project analysis.

See Chapter 3, Social and Economic Development. The present net value of the alternative actions has been analyzed in an effort to address concerns relative to this project. Chapter 3, Socio-economics, summarizes the changes in present net value between alternatives.

Issue 6E: Expand discussion on infrastructure needs for Ketchikan (housing, schools, etc.).

Letters and Comments on this Subject Include:

871

Examples Included:

It would be useful to have some estimate of possible new job creation which would be based in Ketchikan, perhaps relocated from other communities. Such information would be useful in planning a responce to possible community based housing and other service needs, if necessary. #871

Forest Service Response:

Employment within the timber industry can be subdivided into a number of categories. For the purpose of this analysis we can identify three groups of workers: the extraction group, the processing group, and the service group. Individuals within the latter two groups usually have an established residence and serve the industry from within a community on a general basis (machine shop, pulp mill), or, they may provide their services at any site in need of that service, and then return to their home base. The former group (extraction) can be composed of Southeast Alaska residents or non-residents, but both must travel to and live seasonally at the harvest area to participate.

Neither of these groups will have any appreciable impact on, or create an appreciable need for, new or additional community infrastructure such as schools, health and medical services, harbor, or public safety support. These trends are attributable to the established nature of timber harvest in southern Southeast Alaska.

See Chapter 3, Social and Economic Environment, Employment and Income: Effects of the Alternatives / Timber Industry, or Lifestyles and Communities: Effects of the Alternatives / Infrastucture.

Issue 6F: Potential value of SSRAA hatchery and Traitors Cove fish runs.

Letters and Comments on this Subject Include:

754,758,759,760,777,853,854,857

Examples Included:

Commercial fisheries on salmon, crab and sea cucumber is substantial in this project area. #853

Even with the current state of the art timber practices no guarantees can be made that the timber activity will not result in a negative impact to the hatchery program. This program is vital to SSRAA's survival, as well as millions of dollars to the commercial fishing industry. #857

Forest Service Response:

The value of the SSRAA hatchery in Neets Bay is addressed in Chapter 3, Social and Economic Environment. Predicted changes by VCU are identified in the Fisheries section of Chapter 3. The Traitors Creek drainage would be represented by VCU 739 data, which is the major tributary within that VCU.

Concerns identified following the draft EIS in the Neets Bay and Traitors Creek drainage, have been addressed by the full IDT and where appropriate adjustments have been made to harvest design. The Forest Service position remains as stated in Chapter 3 that, "Current standards and

guidelines, and management area prescriptions are expected to limit measurable effect on fish during timber harvest and related activities."

Lastly, as a Special Use Permit holder, SSRAA provides a valuable asset to the fisheries resource, as well as the community. They are an integral part of the type of Multiple Use management the Forest Service is mandated to encourage; however, their use must remain compatible with other uses identified within the Forest Plan. The Neets Valley was identified as an area where timber harvest was part of the management plan when the SSRAA permit was issued in the early 1980's, and it remains within that category. The SSRAA Neets Bay facility is currently permitted on a site originally developed as a logging camp with its dock at the old LTF. Also see response to Issue 2B.

Issue 6G: Implementation of this project will provide jobs.

Letters and Comments on this Subject Include:

735, 738, 739, 751, 762, 781, 782, 871, 873

Examples Included:

Alternative #6 would also provide many jobs which are greatly needed in this area. I believe Alternative #6 would keep Ketchikan "green" both environmently and economically. #735

It [Alternative 6] *would also create more jobs to help diversify our economy.* #738

It would be useful to have some estimate of possible new job creation which is based in Ketchikan... #871

Forest Service Response:

The Preferred Alternative, as well as the other action alternatives, would contribute to meeting Forest Service/KPC Contract volume commitments and the support of current employment levels. Table 3-92, Chapter 3 of the DEIS identified projected timber related employment. Those projections were intended to illustrate differences between alternatives. The selection of any of the action alternatives will not effect a net loss or gain in regional employment levels but would maintain employment at current levels. Also see response to 6F.

Issue 6H: Special interest groups have too much influence on timber sales.

Letters and Comments on this Subject Include:

729, 743, 748, 753, 762, 763, 764, 771, 783, 785, 851

Examples Included:

If these envionmentalist aren't stopped there won't be an American left that has a job. #762

In our opinion it is hightime the impact of envionmental organizations be reduced to nothing. They represent a very minute percentage of the population and as such they should have no impact on timber sales in the Tongass National Forest. #763

I request that the FS work to halt the politically driven and unsustainable timber cut targets that industry is and has been for decades forcing upon the public. #785

I ask that you do not unnecessarily delay timber sales in the area. Such a consideration would represent a "caving in" to interests that contribute nothing to our economy, yet demand that our economy continuously contribute to meet their selfish interests. #851

Forest Service Response:

All public comment was identified and carefully considered by the full IDT. The IDT seeks to balance public desires with resource needs, while meeting the Purpose and Need stated in Chapter 1. The IDT and Responsible Official do not attach more or less significance to comments, based on the source of those comments. Comments are considered for their merit, in relationship to multiple-use management, project implementation, and the Forest Plan.

Issue 6I: Supply the demand for wood products.

Letters and Comments on this Subject Include:

725, 852

Examples Included:

The demand for our wood products is strong and is increasing. #725

The demand for wood products from our pulp mill and sawmills has been understated in both this D.E.I.S. and others. #852

Forest Service Response:

Please refer to Chapter 1, Purpose of and Need for Action. Pages 1-6 through 1-8. See also response to issue 6E.

Issue 6J: Specific comments on the North Revilla DEIS.

Comments Include:(6K/1)

Trying to maintain an overwhelming amount of wilderness in south AK is discriminatory to the elderly, the poor and those of us physically unable to access the lakes and remote islands. #758

Forest Service Response:

Creating Wilderness and providing funds for the maintenance of Wilderness areas is a function of the executive (president) and legislative (Congress) branches of government. The Forest Service fulfills its multiple use mandate only in concert with Agency direction and congressional funding limitations. The Forest Service/Tongass National Forest, by agency policy, strives to meet the needs of the nation based on these constraints. The Forest Service is actively engaged in studies to keep abreast of current and future needs which could be fulfilled by the National Forest System. Nationwide and locally, these needs are varied and include commodity as well as amenity needs.

The proposed action addresses commodity needs in the form of timber harvest in support of the local forest products industry. It addresses amenity needs with increased dispersed recreational opportunities, which can be enhanced for some forest visitors within the Project Area, by LTF and road development. Also see response to Issue 3C.

Comments Include:(6K/2)

I think with the economic condition that our government is in you should definitely stress economic returns to the federal and state treasury. Economics for the Ketchikan area and for the entire United States should be the driving force in determining which alternative should be selected. #766

Forest Service Response:

The Responsible Official, in selecting an alternative for the Record of Decision (ROD), must consider many factors which must be thoroughly explored and developed within the Analysis. See Chapter 1, Purpose and Need, Decision to be Made and Responsible Official. The National Environmental Policy Act (NEPA) requires that Environmental consequences be defined to provide a clear basis for choice among options. The economics of an alternative is one of many important factors to be balanced within the specific alternative to be selected by the Responsible Official.

Comments Include:(6K/3)

The Forest Service is out of compliance with Section 101 of TTRA because if fails to support its claim that the sale meets market demand....The agency cannot rely on any purported "demand" studies prepared by Brooks and Haynes, Irland and Gruenfeld. These studies fail to assess "demand" as a price-quanity relationship as required by the agency's NFMA planning regulations. See 36 C.F.R. Section 219.12(e)(3): "To the extent practical, demand will be assessed as price-quality relationships." #853

Forest Service Response:

The existing Forest Plan was modified in 1991 to meet the requirements of TTRA. The "demand" met by this action is based on the level set by Forest Plan and subsequent 10-Year Sale Schedules. As such, assessing demand for the Long Term Contracts is beyond the scope of this project level analysis. See Chapter 1, Purpose and Need for Action. See also the response to issue 6E.

Comments Include:(6K/4)

We have a world class resource, right in our backyard, whose value as the largest remaining temperate rainforest far exceeds any resource extraction value. #853

Forest Service Response:

See response to (6K/1). The Forest Service mandate is to meet a balance of commodity and amenity needs through Multiple Use resource management. Approximately two thirds of the temperate rainforest of Southeast Alaska is currently protected by management designations which preclude or severely limit timber harvest. The remaining acreage is a very important resource in the economy of Southeast Alaska. See Chapter 3, Socio-Economic Environment, to see how resource extraction fits in the balance. Also see response to issue 6G.

Comments Include:(6K/5)

The introduction to the economic chapter of the DEIS suggests that the communities of Ketchikan, Metlakatla and Thorne Bay will be affected by the proposed action, however, there is no discussion nor data to support such a conclusion. #871

Forest Service Response:

See responses to 6D and 6F. The communities of Ketchikan, Metlakatla and Thorne Bay each have substantial individuals and assets geared towards the forest products industry and the KPC long-term contract. These employees and assets are concentrated at the pulp and sawmills (Ketchikan and Metlakatla) which process the Forest Products harvested throughout the KPC contract area. The Thorne Bay community is the site of the KPC sort yard which acts as a distribution and scaling site for all volume cut as part of the KPC long term contract. Also see responses to Issues 6H and 6F.

Comments Include:(6K/6)

The cumulative effects analysis should consider the effects on both natural resources and socioeconomic values. #873

Forest Service Response:

See Chapter 3, Social and Economic Environment, Lifestyles and Communities: Effects of the Alternatives, Cumulative Effects.

Comments Include:(6K/7)

DFG is concerned that except for sport hunting expenditures, the DEIS does not evaluate other economic value of wildlife. The economic analysis should evaluate the economic cost of decreasing wildlife populations within the Project Area for each alternative over the entire rotation. #873

Forest Service Response:

See Chapter 3, Wildlife, Effects of Alternatives. Also see, Chapter 3, Social and Economic Environment, Employment and Income: Affected Environment / Nonconsumptive Use.

The value of the economic cost of decreasing wildlife populations in the Project Area, can only be defined within the context of supply and demand. Because the predicted supply equals or exceeds predicted demand within the project area, no economic cost of decreased wildlife populations can be projected for the big game species represented within the area, as a result of this project.

Comments Include:(6K/8)

On page 3-184 "Timber supply and demand" the Forest Service states that "93 percent of the timber harvested on private land was exported in the round." During the State/Forest Service meeting on the SDEIS of TLMP is was established that 25 percent of the private harvest was utilized in the local market and 75 percent was exported as round logs. Kathleen Morse (Forest Service resource economist for the Alaska Region) participated in the sub-working group on timber supply and demand. Project plans should be consistent with the SDEIS for TLMP. #873

Forest Service Response:

The figures established during the State/Forest Service meeting referenced were estimates established for planning purposes per K. Morse. 93 percent was the 1990 amount exported per "Timber Supply and Demand" 1990. The percentage reported in "Timber Supply and Demand" 1991 is approximately 75 percent; however, it is anticipated that the 1992 percentage will once again be in the 90 percent range per K. Morse.

Comments Include:(6K/9)

The DEIS's analysis of socio-economic consequences of the various alternatives is inconclusive. Table Sum-12 identifies employment effects of the proposed action ranging from low of 379 jobs (Alternative 3) to a high of 568 jobs (Alternative 2). Corresponding personal income estimates from these proposed alternatives range from 15.5 to 23.2 million.

What is not mentioned is the socio-economic effect of what appears to be a major shift in timber operations onto the Ketchikan Ranger District...Undoubtedly, many of the existing jobs that have been projected are already occupied in primary and secondary processing. How many of the logging and other primary support jobs will be new to the community? #873

Forest Service Response:

See responses to 6F and 6H. This analysis does not predict forest products industry jobs above or below the existing levels.

Issue 7: Marine Environment.

Issue 7A. Excessive number of LTF's throughout Project Area.

Letters and Comments on this Subject Include:

727, 750, 755, 777, 852-856, 860, KS1, KS3, KS6

Examples Included:

One of the most deterimental impacts to the aquatic life in this project plan is the number of Log Transfer Facilities (7 to 9 depending on alternative) slated for active use. #853

The agency has proposed a number of LTF's for this project, including several new ones. LTFs are a great concern, ESPECIALLY IN TRAITOR'S COVE. #854

Forest Service Response:

The number of LTF's proposed for use in the North Revilla Project Area has been reduced from 9 in the DEIS to 7 in the FEIS. LTF's at N.W. Traitors (LTF # 18) and North Traitors (LTF # 22) are not proposed in any of the FEIS alternatives.

The Chin Point (LTF # 7) site is the only new LTF site proposed in the Project Area. All other proposed sites are existing LTF's.

Issue 7B. The negative impacts from the Virgin Bay LTF will significantly outweigh any advantages.

Letters and Comments on this Subject Include:

852, 854, 867, 873, 875, KS1, KS3, SS2

Examples Included:

The State is opposed to the development of the LTF (LTF #18) and logging roads within the state selected lands (NFCG #282) at Virgin Bay during this entry. #873

Forest Service Response:

The N.W. Traitors (LTF # 18), located in Virgin Bay, is not included in any alternatives in the North Revilla FEIS.

Issue 7C. The negative impacts from the North Traitors LTF will significantly outweigh any advantages.

Letters and Comments on this Subject Include:

772, 853, 854, 873, 875, KS1, KS3, KS4

Examples Included:

The Tongass Conservation Society strongly opposes the construction...because of the concentration of valuable marine resources in the small and productive Traitors Cove area... #853

The Forest Service should evaluate alternatives for all proposed LTF's in Traitors Cove. #873

The North Traitors Cove Site (#22) is also a biologically productive site. During dive surveys, NMFS determined that the site does not meet Timber Task Force LTF siting guidelines for productivity because it supports commercial quantities of sea cucumbers. Nevertheless, NMFS indicated that the site would be an appropriate location for an LTF because of the volume of timber expected to be transfered. #873

Forest Service Response:

The North Traitors LTF (LTF # 22), located in Virgin Bay, is not included in any alternatives in the North Revilla FEIS.

Issue 7D. Inadequate analysis of the effects of the project upon the marine environment.

Letters and Comments on this Subject Include:

756, 772, 853, 854, 863, 875, KS4, SS8

Examples Included:

Tongass Conservation Society believes that the Forest Service has understated their (LTF's) in general and site-specific analysis of important areas such as Traitors Cove are brief and inadequate. #853

The agency has done no cumulative impacts assessment of putting three LTF's in Traitor's Cove. #854

Forest Service Response:

The FEIS has planned to construct only one additional LTF, at Chin Point, adjacent to a previously used LTF site. There will be only one existing LTF utilized in Traitors Cove. All existing and proposed LTF's will be consistent with the Alaska Timber Task Force siting guidelines.

During the environmental analysis, an interdisciplinary team was used to ensure that management needs, objectives, requirements and controls are incorporated in the location of the LTF facility.

Criteria needed to protect soil, water and biological resources were identified by the IDT process. Detailed mitigation measures will be developed in the design phase using criteria from the environmental analysis and through consultation with appropriate resource staffs. Contract provisions and drawings will then be prepared that meet the soil, water and biological requirements. State and Federal agencies with expertise in marine and intertidal ecosystems have been contacted to gain necessary information for the environmental analysis.

Issue 7E. General concerns expressed about the Klu and Shrimp Bay LTF's.

Letters and Comments on this Subject Include:

772, 853, 873

Examples Included:

Under the section labeled "Sites Considered in Detail", the planning team has left out any mention of the LTFs planned for Shrimp and Klu Bay and the associated environmental impacts (3-p 349). #853

...DFG may eventually have coastal consistency concerns for other LTF's, particularly the facilities at Shrimp Bay and Klu Bay, after they re reviewed in the field. #873

Forest Service Response:

A discussion of the Klu Bay LTF # 4 and Shrimp Bay LTF # 5 is included in the North Revilla FEIS.

Issue 7F. What impact will this project have on the SEAFAC underwater testing facility near Back Island.

Letters and Comments on this Subject Include:

Bill Harney, USN-SEAFAC

Examples Included:

...the potential impacts of log rafting on the Back Island testing facility.

Forest Service Response:

SEAFAC and Boyer Alaska Barge Line, the principle supplier of log raft towing service in the area, coordinate activity schedules in Behm Canal to minimize mutual impacts upon their respective activities.

Issue 7G. Effectiveness of LTF siting BMP's to minimize adverse impacts of LTF's.

Letters and Comments on this Subject Include:

NMFS, 867, KS4

Examples Included:

You have determined that the proposed actions, mitigated by the Tongass Forest Plan Revision Forest-wide Standards and Guidelines that limit vessel and aircraft proximity to marine mammels, are not likely to affect these listed species.

We concur with your conclusion that the proposed actions are not likely to affect endangered or threatened species within our purview. #NMFS

We question that the proposed LTF sites were designed to maximize flushing suspended bark away from the LTF area to the open sea before if can accumulate on the bottom. #867

Forest Service Response:

Location of LTF sites involves transportation analysis of the road system tributary to the facility and site-specific siting considerations. Required information includes: (1) preliminary subsurface evaluation; (2) an inventory of salmon spawning areas; (3) identification of areas protected from wind and adverse sea and swell conditions; (4) existing upland facilities; (5) safe access to the facility from the uplands; (6) submarine bark dispersal; (7) the site's biological productivity; (8) sensitive habitats; (9) safe marine access to facility; (10) storage and rafting areas; (11) locations of eagle nests; (12) tidal flushing; (13) small craft boat anchorages and use areas; (14) effects of earthquakes, and (15) proximity to wetlands.

A monitoring plan is developed and will be implemented to detect and evaluate possible effects of bark accumulation, oil sheens, and surface runoff. Monitoring of existing LTF sites started in 1991 and is ongoing. As more data from the monitoring is collected, further analysis of site-specific information can be used to analyze the impacts of log transfer at these sites. All LTF sites on the Ketchikan area are being evaluated for non-point source pollutant discharge systems. Some sites are to be modified in 1993 to comply with the new Storm Water Discharge for Industrial Site requirements established in 1992.

Permits required include tideland permits, solid waste permits, COE 404 and EPA 402 permits, State 401 certification and consistency with Alaska Coastal Management Program.

Issue 8: Change TLMP Land Use Designations

Letters and Comments on this Subject Include:

234, 235, 394, 777, 778, 853-855, 858, 859, 862, KS4

Examples Included:

Currently the North Revilla project plan and the Ketchikan Area of the Tongass National Forest over emphasizes timber harvesting. The proposed EIS demonstrates a disregard for the multiple purpose use approach the United States Forest Service has been touting for the last decade. #777

- *The Tongass Conservation Society is strongly opposed to further road and timber harvesting in this drainage. We request that the Forest Service not construct any new roads in this drainage and that all timber units be removed from the timber base.* #853

Forest Service Response:

This group of commentors essentially asked the Forest Service to change the TLMP Land Use Designations to eliminate, reduce, or increase the level of harvest and/or maximize other specific resources.

Land use allocation is a Forest Planning issue. The current Forest Plan is under revision and provides a forum for people who wish to see the area managed in a manner that significantly differs from the current direction.

Specific areas or key areas such as Traitors Creek/Cove or Margaret Lake, Neets Creek, and upper Klam Creek were dealt with through the formulation of the alternatives to either include or exclude from consideration. Indian Point was not considered because it was recently harvested, and additional harvest would not meet standards and guidelines. The Orchard Lake area is a proposed semi-primitive recreation area in the TLMP Revision, and timber management would be incompatible with that designation. Other key areas, such as high value deer habitat or identified subsistence use areas were avoided to differing degrees in various alternatives, while still satisfying the purpose and need for the project.

Issue 9: Evaluate the Transportation Link

Letters and Comments on this Subject Include:

001-019, 021-090, 092-168, 070-233, 236-239, 241-257, 259-339, 341, 343-358, 360-409, 412, 414-489, 491, 494-546, 548-628, 630-639, 641-661, 663, 664, 666-708, 710-713, 715, 716, 718-723, 726, 731, 736-738, 743, 745, 749, 751, 753, 763-765, 771, 773, 775, 776, 785, 787-824, 826-832, 852, 857, 858, 865, 866, 869, 871, SS1

Examples Included:

Ketchikan is landlocked and very few roaded recreation opportunities are available. All options for future access to this area from Ketchikan should be maintained and transportation corridors to the mainland from Ketchikan should be kept open. #001-019, 021-090, 092-168, 070-233, 236-239, 241-257, 259-339, 341, 343-358, 360-409, 412, 414-489, 491, 494-546, 548-628, 630-639, 641-661, 663, 664, 666-708, 710-713, 715, 716, 718-723, 771, 787-824, 826-832, 852, 858.

I like to go camping and I like to go fishing. And if we had a new road we can go more places to camp and go fishing. So please make a new road [age 9]. #736

The Forest Service's determination that roaded access into the project area is not in the forseeable future is realistic. At the same time, the Borough believes that it is necessary that the Forest Service consider the possibility that at some later date, a road corridor which you would construct as part of this project, could be utilized as an alignment for an off-island road. #871, 873

Forest Service Response:

A large number of commentors requested the Forest Service to evaluate the proposed transportation link and utility corridor that would provide access from Ketchikan to the northern portion of the island and across the Bradfield Canal.

The transportation and utility corridors have been identified in studies by R.W. Beck and the Ketchikan Gateway Borough. The Alaska Legislature passed Senate Joint Resolution (SJR) 40 in 1992, urging the Forest Service not to preclude any of the identified transportation and utility corridors. The transportation and utility corridors are being considered in the current TLMP Revision process.

The North Revilla project contains a small portion of the two routes identified near Orchard Lake. The IDT reviewed the possibilities of the action being taken on the transportation and utility corridors in the foreseeable future. The review indicated that the corridor could be used for electrical transmission lines within the next decade. The review concluded that the road connections proposed are unlikely within the foreseeable future and that no actions proposed under any alternative would preclude use of any of the transportation and utility corridors.

The Forest Service has had conversations with various agencies and has reviewed the studies previously mentioned, and is familiar with the proposed routes for both the powerline and the transportation corridor. During the MELP analysis, road locations and grades were evaluated within the context of potential future uses. It is not an accident that the proposed road construction in each alternative, near a potential corridor, is on a similar line and grade. However, it is also important to note that roads constructed for timber sale use can be built only to the standard required for the harvest of timber (36 CFR Section 223.38). All new road construction proposed for the North Revilla project is designed for the primary purpose of timber transport and not for other uses, unless specifically designated for that purpose in the Record of Decision (ROD). Additional funds would be required to construct the road to higher standards to accomodate other uses. These supplemental funds would be used to cover the extra costs incurred from building the road to a higher standard than is required for timber access and hauling.

In conclusion, the proposed transportation and utility corridors are separate from this project, outside the scope of this EIS, and will require a separate NEPA analysis. The North Revilla project is not linked to Ketchikan and is independent to any road linkage.

Issue 10: Development outside the Project Area.

Letters and Comments on this Subject Include:

148-154, 243, 730, 732, 756, 769, 770, 771, 776, 860, KS4, SS4, SS9

Examples Included:

Caulder Bay to Labouchere Bay cut-off road needs to be implemented. #148

Forest Service Response:

Comments regarding the general level of development outside the Project Area are not considered issues ripe for decision under the North Revilla EIS. These areas include Cleveland Peninsula, Carroll River, Orchard Creek (excluding Orchard Lake), and Prince of Wales Island.

Issue 11: Eliminate below cost timber sales.

Letters and Comments on this Subject Include:

258, 765, 785, 851, 852, 859, SS1, SS2, SS3

Examples Included:

The below cost sale issue and the deficit sale issue are also major concerns of ours. We recommend that the Forest Service offer the most economic selection of timber possible under their guidelines. #SS1

The cost of timber sale development could be drastically reduced if many of the "archaic" standards used were reduced or eliminated and a "private sector" approach were taken toward the maximizing of revenues on the part of the USFS. #851

Forest Service Response:

Below-cost timber sales is a national issue and not within the scope of this project. The financial impacts of the alternatives, based on a mid-market analysis, are displayed in Chapter Three in this EIS.

Issue 12: Determine timber supply and demand

Letters and Comments on this Subject Include:

725, 852, 853, 859, 862

Examples Included:

The Forest Service is out of compliance with Section 101 of TTRA because it fails to support it's claim that the sale meets market demand. SEACC specifically requested this proof in its scoping comments. The agency cannot rely on any of the purported "demand" studies prepared by Brooks and Haynes, Irland and Gruenfeld. These studies fail to assess "demand" as a price-quantity relationship as required by the agency's NFMA planning regulations. See 36 C.F.R. Section 219.12(e)(3): "To the extent practical, demand will be assessed as price-quality [quantity] relationships." #852

The expected demand of 400 MMBF per year depicted on page 224, Chapter 3, volume 1 of the D.E.I.S. is simply wrong. The existing mills currently operating in Southeast Alaska alone demand more than that... #852

Forest Service Response:

36 CFR Section 219.12(e)(3) cited is part of the analysis of the management situation required for forest planning. The timber demand studies requested are clearly a forest planning question and beyond the scope of this site-specific project analysis.

Timber supply and demand is a regional issue and exceeds the scope of this analysis. A site-specific environmental analysis documents the effects of the proposed activities; it does not constitute the selling or conveyance of property rights. The volume of timber cleared in any NEPA document may be offered (sold) in part, in whole, or not at all.

The timber offered for sale (timber offerings) may occur in one year or be spread over a three- to five-year period. Therefore, trying to predict the effects of the proposed activities upon the regional timber supply or demand is beyond the capability and scope of this document. See also the response to issue 6e.

Issue 13: Extend Public Comment Deadline for the DEIS

Letters and Comments on this Subject Include:

860

Examples Included:

...it would seem reasonable to extend the public comment period and increase your efforts to get input if you do not receive a similar amount of public response [Cleveland Peninsula Plan]. #860

Forest Service Response:

The Council on Environmental Quality Regulations (40 CFR Part 1506.10) require a minimum 45-day public comment period on draft environmental impact statements. The public comment period for the North Revilla DEIS ran from December 24, 1992 to February 12, 1993. The Forest Service received 877 written and oral comments, with many of the written comments received after the February 12, 1993 deadline. All comments were accepted and considered.

Issue 14: Prepare a New Analysis

Issue 14A. Write a new EIS or prepare a supplement to the DEIS.

Letters and Comments on this Subject Include:

853, KS1, KS3

Examples Included:

In conclusion, the Tongass Conservation Society requests the Forest Service planning team to revisit the North Revilla logging plan and write a supplemental draft environmental impact statement... #KS1

I would propose that the U.S. timber providing service dramatically alter its plans and take into account sustainability and multiple use. #KS3

Forest Service Response:

The North Revilla FEIS provides a full and fair discussion of significant environmental impacts and informs the decision-maker and the public of the reasonable alternatives which avoid or minimize adverse impacts or enhance the quality of the human environment. The Code of Federal Regulations [40 CFR 1502.14(a)] states agencies shall "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which have been eliminated from detailed study, briefly discuss the reasons for their having been eliminated." The Forest Service feels each alternative (except the no-action alternatives) must meet the purpose and need to some large degree to be considered "reasonable." The Forest Service is unaware of any substantial change in the proposed action or of any significant new circumstances or information that would necessitate producing a Supplemental DEIS under 40 CFR 1502.9(c)(1)(i),(ii).

Issue 14B. Write a programmatic EIS for Revilla Island.

Letters and Comments on this Subject Include:

860

Examples Included:

T.S.A. also strongly believes that the Forest Service should do one, comprehensive, long range logging plan for all of Revilla Island. #860

Forest Service Response:

The Forest Service utilizes a two-step planning process: the first-level Forest Plan provides land use allocations to a second-level project plan, where site-specific social and environmental effects are analyzed. The Tongass Land Management Plan (TLMP, 1979a, as amended) is the planning stage where tradeoffs are analyzed among areas forest-wide over the remaining contract term and beyond. This would include evaluation of many items such as wildlife population viability, subsistence, availability of timber, and other considerations. The North Revilla project was scheduled for analysis after consideration of the current TLMP (as amended 1986, 1991).

Appendix L

The TLMP is a permissive plan with four zones or Land Use Designations (LUD's) and allows analysis and scheduling of individual projects based on a zoning concept. The entire North Revilla Project Area is in Land Use Designations III and IV. LUD's III and IV permit development for commodity resources. Chapter 1 and Appendix A display the reasons for scheduling the North Revilla project at this time.

The TLMP is currently under revision, and the public can influence the scheduling of timber sale and other projects for the whole forest. The first draft was available for public review from June 1990 through January 1991. A supplement to the Draft EIS for the revised Forest Plan was available for review and public comment until December 1991. The North Revilla FEIS is consistent with the TLMP Revision SDEIS. The comprehensive analysis in the TLMP Revision SDEIS (including the cumulative effects regarding projected areas of timber harvest) has been fully considered in proposing the North Revilla area for timber harvest. The allocation of timber harvest forest-wide, or KPC contract area-wide is outside the scope of a project-level plan such as the North Revilla project.

Issue 15: Range of Alternatives

Letters and Comments on this Subject Include:

727, 757, 766, 771, 776, 778, 785, 853, 861, 862, 867, 868, 873, 875, KS1, KS3, KS7, KS8

Examples Included:

This is a logging plan for 200 million board feet of timber with a few minor variations that in no way constitute real alternative as sharpley defined the issues raised in scoping. #KS3

The North Revilla draft logging plan offers no alternatives except extensive roading and logging in these fish and wildlife habitats, scenic and recreational areas and subsistence use opportunities. #727

Forest Service Response:

Range of Alternatives - The Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) require that the alternatives, including the proposed action, respond to the underlying purpose and need for the project (40 CFR 1502.13). In the Notice of Intent (NOI), published in the Federal Register, the Forest Service identified the purpose and need for the proposed action to be to make approximately 200 million board feet (MMBF) of timber volume available in compliance with the Ketchikan Pulp Company Long-term Timber Sale Contract.

Appendix A of the EIS describes the reasons for scheduling the environmental analysis for the North Revilla Project Area at this time. Appendix A also describes the need for approximately 200 MMBF in one or more offerings to assist in meeting contract requirements. It briefly addresses the reasons why providing less than the contract volume was not considered in detail. This would include the option of cancelling the contract. In addition, reducing the volume provided, cancelling the contract, or withdrawing the project area from the contract area does not meet the purpose and need for the North Revilla Project. Appendix A also includes a discussion of available timber outside the project area.

The Forest Service has administrative authority to implement the KPC contract. It was to this end that the purpose and need was written for the North Revilla Project Area. Other public interests and concerns are considered in each alternative developed to meet the KPC contract requirements. The no-action alternative is also fully evaluated.

The North Revilla alternatives are designed to respond to the significant issues, while (1) meeting the purpose and need for the project and (2) complying with environmental regulations and Forest Plan standards and guidelines. Social and environmental consequences of the individual resources are fully analyzed by resource in Chapter 3 and compared in Chapter 2. It is the intent of the analysis to present a clear basis of choice to the decision-maker, in this case the Forest Supervisor.

The action alternatives presented in the FEIS range from 174 MMBF to 251 MMBF net sawlog plus utility (excluding ROW - road clearing volume). This range is 87 percent to 126 percent of the stated goal of 200 MMBF of total harvest. More importantly, these alternatives represent

reasonable courses of action that address the issues and provide a clear basis for choice among options while accomplishing the stated purpose and need.

As stated at the beginning of Chapter 2, the alternative development process was issue-driven and began with the determination of specific options that could be utilized to resolve each issue. The developed alternatives explore ways to satisfy public concerns and resolve the issues. They respond differently to the issues and provide a range of choices to the decision-maker and the public while still meeting the purpose and need. For example, Alternative 4 focuses the proposed actions, as much as possible, away from the habitat conservation area recommended by the Interagency Committee on Developing a Strategy for Maintaining Well-distributed, Viable Populations of Wildlife Associated Old-growth Forest in Southeast Alaska. Alternative 3 focuses the proposed actions away from helicopter yarding. Other alternatives similarly reflect different approaches to addressing the public issues.

Alternatives with less volume - Under 40 CFR 1502.14(a) agencies are required to "...rigorously explore and objectively evaluate all reasonable alternatives..." The Forest Service has determined alternatives must meet the project proposal objectives to be considered "reasonable". Consequently, the North Revilla project has not considered in detail any alternatives which significantly failed to meet the described Purpose and Need. As a result of reconnaissance efforts between the DEIS and the FEIS, and in response to public comments, all of the alternatives have been modified to varying degrees. For example Alternative 4 was dramatically modified to address wildlife and subsistence concerns in the Traitors Creek/Cove area. Alternative 3 (174 MMBF) and Alternative 4 (177 MMBF) were retained because they addressed significant issues and met the purpose and need, if the relative accuracy of the volume estimates is assumed to be plus or minus 10 to 20 percent.

Alternative 2, which schedules the harvest of 251 MMBF, exceeds the purpose and need by approximately 26 percent. This alternative was retained for the following reasons: 1) it met the purpose and need, 2) addressed a significant issue, i.e., how much volume could this project area make available between now and 2004 (end of the KPC contract) while still meeting the Forest Plan standards and guidelines, and 3) allowed for a site-specific analysis of the reasonably foreseeable (indirect) effects, for all resources, based on implementation of the Forest Plan rather than decadal projections listed in the TLMP Draft Revision (1991a). This allowed the public to have a clearer picture of what the reasonably foreseeable, desired future condition, described in the Forest Plan would look like, and to therefore provide more focused public comment.

A public comment alternative with a lower level of harvest (106 MMBF) was developed and analyzed in considerable detail by the Forest Service. This alternative was subsequently dismissed from consideration because it did not meet the stated purpose and need for the project. In fact it fell short of the purpose and need by approximately one half or 47 percent. It is discussed in Chapter 2.

Issue 16: Multiple Use & Sustained Yield

Letters and Comments on this Subject Include:

103, 130, 134, 174-176, 183, 193, 331, 338, 357, 407, 532, 533, 544, 548, 562, 592, 593, 639, 725, 730, 732, 734, 740, 741, 743, 748, 751-753, 755, 756, 765, 771, 775, 780, 781, 783, 785, 786, 851, 852, 854, 858, 862, 867, 868, 875, KS4, SS6

Examples Included:

Timber availability in this area will drop from roughly 24 mmbf/yr through the year 2004 to roughly 8 mmbf/yr for the succeding 50 years, a drop similar to the one we saw in CPOW. This does not represent sustained yield harvest. #854

The second reason we prefer Alternative 6 is that it "scores" very well in the other areas considered important in evaluating the impacts of timber harvest. It minimizes class I and II stream crossings, maximizes the retention of unfragmented old-growth blocks, and maximizes habitat preservation, while still allowing for a viable timber program. In short, this is the best example of a "multiple-use" alternative. #868

Forest Service Response:

Projected Sustained Yield - TLMP Draft Revision (1991a) lists the sustained yield for the Project Area as 10 MMBF/year if Alternative P were adopted. The North Revilla Project Area contains enough old-growth to support 8 MMBF/year of harvest, without considering any yields from second-growth stands, if TLMP Draft Revision (1991a) Alternative P land use designations are considered in conjunction with the existing Forest Plan (whichever is most restrictive). These figures tend to substantiate each other as the planning team estimates that second-growth yields would provide at least 10 percent additional volume before the year 2054. Calculation of the sustained yield is an extremely complex process and exceeds the scope of this project.

Sustained Yield of All Resources - The Multiple Use Sustained Yield Act (1960) states in Section 2: "The Secretary of Agriculture is authorized and directed to develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained therefrom. In the administration of the national forest due consideration shall be given to the relative values of the various resources in particular areas."

The Act further states in Section 4(b): "Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."(16 U.S.C. 531)

Further direction regarding sustained yield management is contained in Section 101 of the TTRA (1990), which states: "The Secretary shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle."

Sustained yield is calculated and managed at the forest level, which means the Forest Service must manage the entirety of the Tongass National Forest on a sustained yield basis. There is no requirement that each project area or other segment of a National Forest be managed in isolation on a sustained yield basis. It is also not biologically possible to manage any isolated area for maximum production of all resources simultaneously. The existing Forest Plan made a decision to reduce the scope of the sustained yield management unit from the entirety of the Tongass National Forest to individual Administrative Areas, i.e., Chatham, Stikine, and Ketchikan. Consequently, sustained yield for the Ketchikan Area of the Tongass NF is a Forest issue and is discussed in the TLMP and TLMP Revision.

The Forest Service has no requirement to manage the North Revilla Project Area for sustained yield of non-timber resources. Nonetheless, there are individual resources which can achieve "maintainence in perpetuity of a high-level annual or regular periodic output...." Water quality,

soil productivity, fishery production, and outdoor recreation are predicted to be maintained at high levels. Other resources, such as deer, bear, and old-growth habitat, will probably decline on a localized basis, but are planned to be available on a Forest-wide basis.

Multiple Use Policy - The Multiple-Use Sustained-Yield Act of 1960 Section 1 states, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." The Tongass National Forest is managed for multiple uses. Not every area, watershed, or travel route can be all things to all people at all times. Under the current TLMP, approximately 23 percent of the Tongass National Forest is designated LUD IV (areas for commodity development) and an additional 15 percent is designated LUD III (areas for a mix of commodity and aesthetic resource management). Thus, over 60 percent of the entire Tongass National Forest is available to provide scenery, fisheries, wildlife, and subsistence opportunities.

At the project level, the North Revilla Project has developed a range of alternatives which addresses the issues identified in scoping. The range of alternatives, combined with the design criteria and the mitigation measures, protect resources such as wildlife, fisheries, and subsistence opportunities at different levels of intensity.

Issue 17: Karst and Minerals

Issue 17A: Karst features need to be protected.

Letters and Comments on this Subject Include:

756, 854, 862B, KS4, KS6

Comments included:

Were karsts considered in the plan and the real impacts of logging on the fish in a watershed...at Traitor's Cove? #756

There is karst in this area. The agency has apparently done very little to examine this resource in this DEIS, and relies on cave information that is outdated. Given the amount of harvest that has taken place on karst in the past, and given the agency's management obligations, this ecosystem and geologic resource should be examined more thoroughly. #854

Our concern is particularly high with regard to proposed units in karst topography areas. #862B

You claim there is no karst in this area and rely on something written in 1988 before anyone in the Ketchikan area knew about or cared about this unique resource. It is known to any number of people that there are limestone cliffs in the project area. I won't say where they are, but I can tell you that you plan to harvest timber on them. You have not considered this in your plan. You should not harvest on any karst. #KS4

Forest Service Response:

There are no known occurrences of karst features or carbonate rock within the North Revilla Project Area. Potential karst features and carbonate rock within the area have been investigated

by the Forest Geologist and none have been confirmed. The potential for finding cave resources within the Project Area is very low. However, if cave resources are identified that may be affected by the proposed activities, appropriate mitigation measures will be applied during harvest unit layout and road design.

Issue 17B: Mines and claims need to be listed in the document.

Letters and Comments on this Subject Include:

867

Comments included:

The Bureau of Mines, Minerals Availability System (MAS) database documents that there are two historic mineral locations that fall within the North Revilla boundaries. #867

Forest Service Response:

The FEIS has been updated to reflect the mine and historic rockpit information provided by the Bureau of Mines.

Issue 18: No Unit Expansion

Letters and Comments on this Subject Include:

867, 873, 875

Examples Included:

... some timber harvest units have been expanded beyond unit boundaries hown in the Forest Service NEPA documents for past timber sales. #867

The State should be notified of any significant changes, especially increases or significant modifications to unit boundaries in areas of high value fish and wildlife habitat. #873

Forest Service Response:

The boundary configuration of all units selected for harvest by the North Revilla ROD are shown on the unit cards accompanying that document. These unit configurations are based upon IDT analysis using the best office and field reconnaissance data available. During on-the-ground unit layout, it is possible that changes in the planned unit boundary or proposed road location will be necessary to meet enviromental regulations or adopted Forest Service standards and guidelines, or to more fully fit on-the-ground conditions. Unit boundary changes may also occur during sale administration under the B2.37 Minor Change clause which states: "Within Offering Area, minor adjustments may be made in boundaries of timber harvest units or in the timber individually Marked for timber harvest when acceptable to Purchaser and Forest Service." All efforts will be made to keep on-the-ground changes within the planned ROD boundaries, as documented on the

unit cards. All unit changes, including changes to boundaries, will be documented on unit cards. The North Revilla ROD will contain specific language that provides criteria for determining what types of changes are authorized without additional NEPA review.

The District Ranger will be responsible for determining if and when changes in the "as planned" unit are significant enough to warrant additional NEPA analysis.

Issue 19: Cultural Resource Protection

Letters and Comments on this Subject Include:

727, 776, 862, SS4, SS7, SS8

Examples Included:

The LTF site in VCU 738 should be dropped from all plans because there is a major archaeological site in that area. #778

We seriously question how delaying the gathering of such important cultural and archeological information will permit the Forest Service to use such information "in order to formulate viable alternatives." #862

There's also another report called the Waterman report. This has Tlingit place names for all of that particular area. #SS7

Forest Service Response:

The National Historic Preservation Act, the National Environmental Policy Act, and their implementing regulations require a management program to identify, evaluate, preserve, interpret and protect significant cultural resources on a Forest-wide and project-specific level. Proposed North Revilla harvest units and roads have been re-designed or in some cases deleted to avoid directly affecting all known site locations. Recommendations for elimination of specific units, or the modification of unit boundaries and road locations to protect specific site locations have been implemented in portions of the Traitors Creek VCU 739, and the LTF at Virgin Bay in VCU 738 was eliminated from all alternatives.

The laws and regulations which pertain to the protection of archaeological and historic sites (National Historic Preservation Act, the National Environmental Policy Act, the American Indian Religious Freedom Act, and their implementing regulations) require that Federal agencies maintain confidentiality of site-specific information as a means of protection. These regulations also require that Native Americans be involved in the planning process and afforded access to National Forest Lands to acquire traditionally used resources/forest products and to practice their religious beliefs. Native concerns, like all other public concerns, are considered during the planning, inventory, evaluation, and protection process.

Issue 20: Purpose and Need (200 MMBF)

Letters and Comments on this Subject Include:

258, 770, 776, 853, 854, 861, 868, KS1, KS4

Examples Included:

The CPOW was 290 million acres [mmbf] all around and yet your Revilla doesn't meet the purpose needed except for one alternative? Why did you vary from the needed volume here? #776

As in CPOW, the Appendix A explanation is insupportable and fails to satisfy the need to reach the "decision" purportedly made therein through the NEPA process. #854

To begin with the Forest Service states outright that it is necessary to offer at least 200 MMBF from this sale area in order to fulfill a self-imposed three-year supply of timber as part of their contractual obligations with Ketchikan Pulp Company (DEIS 3-6). #853

All the post-TTRA long-term sale EISes on the Tongass have been dictated by the same three year surplus timber supply "need" and the agency has used the same rationale, process and model-induced data to design unit layouts. The legal basis for this approach has been thoroughly questioned before. #863

We commend you for your approach taken in this DEIS. The alternatives provided us with clear choices, all of which accomplished your stated objective of providing 200 MBF for harvest. #868

First let us compliment you on producing one of the more meaningful Environmental Impact Statements that we have reviewed. The selection of alternatives gives the public something rational to consider as opposed to an array of "throw away" alternatives. #861

Forest Service Response:

Purpose and need is too narrow - The Council on Environmental Quality regulations do not provide specific guidelines for the development of the purpose and need for a project. This implies that an agency has considerable discretion in determining the purpose and need. The Forest Service has exercised this authority in a reasonable way that is not arbitrary or capricious.

Purpose and need decision was made outside NEPA - When there is a major Federal action, such as the North Revilla proposed action, there is a requirement to produce a NEPA analysis, which in this case has been determined to be an EIS. One of the key elements in any NEPA analysis is the specification of the project's purpose and need. The specification of said purpose and need is part of the NEPA analysis itself and not a major federal action requiring its own NEPA analysis. Consequently it is not necessary to perform a NEPA analysis to identify the purpose and need for North Revilla.

Incorrect interpretation of TTRA and as a result Appendix A is flawed - The three-year timber supply provision in Section B0.62 of the KPC Long-term Contract is primarily related to Section 301(C)(1). The provision is consistent with Forest Service objectives of providing a three-year supply of NEPA-cleared timber for independent timber sale programs. Section B0.62 also facilitates completion of harvest of the total KPC contract volume by the termination date of the contract, and replaces (along with other provisions in section B0.6) the five-year operating

period timber supply scheduling requirements in the pre-TTRA contract. The provision is wholly consistent with TTRA Section 101. The GAO has agreed that the contract modifications in Section B0.62 comply with the TTRA.

The three-year supply was calculated for the end of the 1993 operating season. An additional 205 MMBF is expected to be harvested during the 1993 operating season. This resulted in a purpose and need of 200 MMBF for the North Revilla Project. The analysis recognizes that volume in the past has come from areas other than the Primary Sale Area (PSA) and will also need to come from off the PSA in future. However, for the first round of EIS's for the Long-Term Sale following the passage of TTRA, it was determined to look first at the PSA as required by sections B03 and B03.1 of the KPC contract. The sale schedule for completing the project is dynamic and changes over time. The changes are made to incorporate new information at the project level and from the Forest Plan Revision. However, the volume figures for the four EIS's currently underway in the primary sale area have not changed. These volume figures were determined in order to produce a three-year supply of timber while still reflecting the resources available in each area.

Issue 21: Unit Cards

Letters and Comments on this Subject Include:

776, 873, 875, 876

Examples Included:

These cards looked too perfectly balanced. I don't trust your reporting of these numbers. I have seen maps of this area and there are alot of rock and muskeg type areas, your units have picked out perfectly the only treed areas. Check your numbers. #776

Where specific Best Management Practices (BMP's) apply, the appropriate BMP numbers and statements should be specified on the unit card. This will provide a specific basis for implementation monitoring. #873

The State commends the Forest Service for the excellent analysis and completeness of unit-specific soils concerns. The soils information included in the planning-level unit cards should be a model for other timber sale EIS's. #873

Forest Service Response:

The unit cards have been substantially improved between the DEIS and the FEIS. Field reconnaissance and incorporation of public comments has improved the overall quality and usefulness of the unit cards. The acres balance because mapped non-forested sites were removed from the unit(s) and small discrepancies due to poor registration between data layers were painstakingly (manually) verified and corrected. The timber type maps (TIMTYP) generally map stands greater than five acres in size. Small rock outcrops and other non-forested inclusions within stands are not accounted for, although the IDT generally excluded non-forested sites larger than one to two acres in size when delineating unit boundaries.

Issue 22: Better Maps

Letters and Comments on this Subject Include:

854, 858, 859, 867, 873, 875, KS4

Examples Included:

There is no wildlife retention proposed in this plan, although agency recommendations based on the current TLMP state that 2,700 acres of retention should be set aside within the project area's VCUs. #854

We believe the DEIS should identify previously allocated old-growth wildlife retention areas located in the project area. #867

Forest Service Response:

The Forest Service appreciates site-specific comments from the public that have pointed out inaccuracies with maps presented in the DEIS. All maps accompanying the FEIS and ROD use the most current information available and correct all site-specific errors identified from field reconnaissance and from public comment.

Old growth "retention" was not mapped in the DEIS (the location of all old-growth was displayed) because none had ever been previously designated. Areas that will be managed to provide old-growth habitat conditions for the life of this project, totaling more than 7,200 acres in size, are displayed on the ROD map. See also response to issue 4R&T.

Issue 23: Clean Air Act - The effect of the prescribed burning upon the local ambient air quality.

Letters and Comments on this Subject Include:

863

Examples Included:

The Draft EIS needs to address two air quality issues for Class II airsheds: the NAAQs for particulate matter less than 10 microns (PM 10) and the PSD Total Suspended Particulate increments. Neither the NAAQS or the PSD increments may be violated. #863

Forest Service Response:

National Ambient Air Quality Standards (NAAQS) for matter smaller than 10 microns (PM-10) indicators are established by EPA as the concentration limits needed to protect all of the public against adverse effects on public health and welfare. PM-10 indicators are utilized because the human respiraitory system cannot efficiently filter out particulate matter this size or smaller. Wildfires and prescribed fires can be a source of fugitive particulate matter less than 10 microns in size.

PSD, Prevention of Significant Deterioration of ambient air quality, is a program established by the Clean Air Act to:

a. Protect public health and welfare from any actual or potential adverse effects from air pollutants not withstanding attainment and maintenance of all national ambient air quality standards.

b. Ensure economic growth will occur in a manner consistent with the preservation of existing clean air resources.

c. Preserve air quality and air quality related values in areas of special national or regional natural, recreational, scenic or historic values.

d. Ensure that any decision to permit increased air pollution is made only after there has been adequate opportunity for informed public participation in the decision-making process and after careful evaluation of all consequences.

The NAAQS for particulate matter less than 10 microns in size would not be violated by the proposed action. PSD increments in the Southeast Alaska, sulpher dioxide, oxides of nitrogen, and total suspended particulate have not been triggered at this point, rendering this analysis unneccesary.

The Forest Service has modified Chapter 3 - Air Quality in the FEIS to address additional information needs. Prescribed burning will occur only if post sale regeneration surveys indicate it is required to meet NFMA regeneration standards (see response to issue 1U-Prescribed Burning). It is anticipated that little, if any, of the scheduled prescribed burning will actually be required to meet the NFMA regeneration requirements. The agency would prefer not to prescribe burn, because of the logistics and cost involved. However, since this cannot be determined until after logging is completed, the potential effects have been disclosed.

Issue 24: Tiering and Referencing

Issue 24A: The EIS improperly tiers to the TLMP SDEIS.

Letters and Comments on this Subject Include:

853

Examples Included:

In addition, the agency improperly tiers to the TLMP SDEIS which is only a draft document. #853

Forest Service Response:

Tiering (40 CFR Part 1502.20) - The North Revilla FEIS tiers to the TLMP 1979a EIS, as amended in 1986 and 1991 (See Chapter 1).

Incorporation by reference (40 CFR Part 1502.21) - The proposed alternatives are also consistent with the standards and guidelines in Alternative P of the TLMP Revision Supplement to the Draft EIS (TLMP Draft Revision 1991a) currently in preparation (Chapter 1). These standards and guidelines are consistent with and, in many cases, provide a higher level of resource protection than the standards and guidelines in TLMP 1979a.

Issue 24B: Incorporating public comments by reference.

Letters and Comments on this Subject Include:

853

Examples Included:

... incorporates herein by reference, pertinent documents submitted by Greenpeace, SEACC and TCS on the Central Prince of Wales Draft EIS and those of SEACC et al. in the recent appeal of the Record of Decision for the S.E. Chichagof FEIS and we request these be included in the record for the North Revilla Project Plan. #853

Forest Service Response:

Public comments and appeal points cannot be incorporated by reference. 40 CFR Parts 1502.20 and 1502.21 discusses Agency tiering and incorporation requirements; it does not discuss comments from the public.

Issue 25: Operational Safety Concerns

Letters and Comments on this Subject Include:

724, 742, 743, 754, 757-760, 774, 777, 779, 852, 857, 858, 868

Examples Included:

These alternative's [2,4 & 5] call for using the existing road through the hatchery residents [SSRAA] housing and childrens play area for log truck and equipment traffic. #742, 754, 757-760, 774, 777, 779, 857

The proposal to leave cedar trees standing in helo units is poorly spelled out. How many trees/acre? What height and type of tree is called for? For example large green cull trees with multiple tops are a clear safety hazard. This should be on a case-by-case basis with consultation of purchaser and operator to minimize safety risks. #858

Forest Service Response:

Road Construction through the SSRAA Facility - The reconstruction of that segment of road will require a re-alignment of the road prism to accommodate public safety concerns. Public access along the existing ROW is part of the special use permit with SSRAA.

Logging Operations - All forms of partial cuts–including wildlife islands (clumps of reserve trees), snag patches, shelterwood/seed tree harvests, and stand maintenance cuts–will be designed through silvicultural prescriptions and logging system feasibility, which will include safety considerations. The Timber Sale Administrator is available to discuss individual safety considerations with the timber purchaser's representative on a unit-by-unit basis, prior to and during actual operations.

Issue 26: Access Management

Letters and Comments on this Subject Include:

315, 332, 334, 354, 359, 386, 387, 447, 475, 556, 716, 774, 777, 785, 799, 807, 808, 852, 859, 866, 873, 875

Examples Included:

Leave major bridges in place after logging is complete. #315

Also in Oregon we had areas limited to small motorbikes and foot travel. #354

Forest Service Response:

Access Management - In all the proposed action alternatives access to the road system is by boat or float plane. Due to these limits, vehicular use is expected to be negligible except for some use of off-highway vehicles. Consequently, access management will consist of managing roads for administrative activities. (Road Maintenance Levels 1 and 2).

Some administrative activities include: salvage harvest, post sale silvicultural, monitoring and maintenance of the Margaret Creek Fish Pass, and fish hatchery access.

Road Disposition - Roads are closed for numerous reasons, including fish and wildlife protection, public safety, and inadequate maintenance funding. It may be necessary to close roads or portions of roads to use by specific vehicle types. Roads under Forest Service jurisdiction can be closed by authority of CFR 36, ch.11, parts 212.7 and 261. Road closure orders will be posted at the Ketchikan Ranger District office.

Some main trunk roads will be kept open to meet long-term objectives. Secondary roads will be left open and seeded to retard alder growth. Maintenance of these will consist of monitoring road and drainage structures for functional and environmental condition. Permanent drainage structures will be installed to meet long-term access objectives; however, maintenance levels fluctuate in response to changing uses. During periods of limited use, maintenance standards are sufficient to provide only for public safety and resource protection. Post sale road management objectives are to keep the road open by leaving portable bridges in place to facilitate administrative activities such as reforestation and precommercial thinning. Maintenance Level 2 will be applied to these roads.

The remaining local roads will be left open except those with bridges. The bridges will be removed and used in other locations. The local roads being left open will not be maintained for vehicular traffic; however, drainage structures will be monitored for functional condition. In general, these roads will grow closed on their own, resulting in closure to vehicular traffic. Maintenance Level 1 will be applied to these roads.

Temporary roads are not being retained on the permanent transportation system. These roads will be closed by removing structures, constructing water bars, and revegetating in accordance with NFMA. Temporary roads were not shown separately as they are included in local road figures.

Alternatives 2, 3, 5, and 6 propose similar management activities. Alternative 4, however, would not enter the Traitors Creek portion of the Fire Cove road system to maintain low hunting and trapping pressures in these areas. Accordingly, the Traitors Creek road system would not be re-opened under Alternative 4.

The FEIS (Ch. 3, Roads and Facilities) displays the arterial and collector roads that are to remain open with limited maintenance, and roads to be seeded to retard against alder growth. Roads not maintained for vehicular traffic will grow closed on their own and are not displayed in Chapter 3, but are illustrated in the alternative map packet.

References for Appendix L

36 CFR. See National Forest Management Act.

40 CFR. See National Environmental Policy Act (NEPA).

Alaska National Interest Lands Conservation Act (ANILCA). 1980. Public Law 96-487, U.S. Congress, 96th Congress, 16 USC 3101, 94 Stat. 2371-2551.

Alaska Regional Guide. See USDA Forest Service 1983.

Alaska, State of. Forest Practices Act, 1990.

Clean Water Act. 1988. Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977.

Coastal Zone Management Act. 1977.

Council on Environmental Quality (CEQ), Executive Office of the President. 1986. Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. 40 CFR Parts 1500-1508.

---------- 1985. Parks, Forests and Public Property. 36 CFR Parts 200 to End.

EPA, 1983. Water Quality Standards Handbook.

Federal Cave Resource Protection Act. 1988.

FSH. See USDA Forest Service, Forest Service Handbooks.

Ketchikan Pulp and Paper Co. (KPC). 1951, amended 1991. Contract No. A10fs-1042, 7/26/51, as amended.

Ketchikan Community Survey.

Kruse, J. and R. Frazier. 1988. Report to the Community of [xx]: Tongass Resource Use Cooperative Survey (TRUCS) A report series prepared for 31 communities in Southeast Alaska. Institute of Social and Economic Research, University of Alaska Anchorage in Cooperation with USDA Forest Service and Alaska Department of Fish and Game, Division of Subsistence.

Multiple Use Sustained Yield Act. 1960. 16 USC 531.

National Environmental Policy Act (NEPA). 1969, as amended. Implementing regulations published under 40 CFR, Parts 1500-1508.

National Forest Management Act (NFMA). 1976. Implementing regulations published under 36 CFR 219.

National Historic Preservation Act (NHPA). 1966.

Rittenhouse, D. 1992. Administration and Implementation of TTRA Buffers. Memo from Ketchikan Area Forest Supervisor to District Rangers.

Robertson, F.D. 1992. Ecosystem Management of the National forests and grasslands. Memo fron USDA Forest Service Cheif to Regional Foresters and Station Directors.

Short, J. 1992. Visual Resource Inventory, Ketchikan Administrative Area, 1988.

Sampson et al. D.Andreson, R.Flynn, J.Schoen and L. Shea and Dr. J Franklin. 1989. Conservation of Rain forests in Southeast Alaska: Report of a Working Group. 1989 North American Wildlife and Natural Resource Conference.

Sampson et al. 1991. New Perspectives in Alaska Forest Management. 1991 North American Wildlife Conference. Edmonton, Alberta, Canada.

TLMP 1979. See USDA Forest Service 1979.

TLMP Draft Revision. See USDA Forest Service 1991.

Tongass Timber Reform Act (TTRA). 1990. Public Law 101-626.

TRUCS. 1988. See Kruse and Frazier 1988.

USDA Forest Service. Forest Service Handbooks:
FSH 2409.17, Silvicultural Practices Handbook.
FSH 2409.18, Sale Preparation Handbook. R-10 Supplement No. 2409.18-91-1.
R-10 Supplement No. 2409.18-92-5.
FSH 2509.22, Soil and Water Conservation Handbook
FSH 2609.24, Aquatic Habitat Management
FSH #462, National Forest Landscape Management

---------- 1977. Executive Order 11990. Wetlands. Fed.Reg. 26961 (1977).

---------- 1979. Tongass Land Management Plan and Final EIS. Series No. 10-57. Alaska Region, Juneau. Amended 1986 (Administrative Doc. No. 147) and 1991 (R10-MB-96 and R-10-MB-97).

---------- 1983. Alaska Regional Guide. Alaska Region Rep. No. 126. Juneau, AK.

---------- 1986. Forest Service Publication R10-TP-2, "Management Indicator Species for National Forest Lands in Alaska."

---------- 1989. Ketchikan Pulp Company Long-Term Sale Area, Final EIS for the 1989-94 Operating Period. R10-MB-66a et al. Alaska Region, Juneau.

---------- 1990. Analysis of the Management Situation. Tongass National Forest Land and Resource Management Plan Revision, R10-MB-89, USDA Forest Service, Region 10, Juneau, AK.

---------- 1991a. Tongass Land Management Plan Revision, Supplement to the Draft Environmental Impact Statement. USDA Forest Service, Tongass National Forest, R10-MB-149 (Supplement to the Draft EIS), R10-MB-146 (Supplement to DEIS, Proposed Revised Forest Plan), R10-MB-145 (Supplement to DEIS, Appendix Vol. 1), and R10-MB-144 (Supplement to DEIS, Appendix Vol. 2). Alaska Region, Juneau.

---------- 1991b.Tongass Land Management Plan amendment (Dec. 1990, signed 4 Feb. 1991).

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---------- 1992b. Executive Summary from Evaluation of the Irland Group Report. USDA Forest Service, Alaska Region, Juneau, AK.

---------- and Alaska Department of Environmental Conservation. 1992. Memorandum of Agreement Between the USDA Forest Service and the Alaska Department of Environmental Conservation.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

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REPLY TO
ATTN OF: WD-126

MAR 4 1993

David Arrasmith
IDT Planning Staff Officer
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act, we have reviewed the **North Revilla - Ketchikan Pulp Company Long-Term Timber Sale Contract,** Draft Environmental Impact Statement (draft EIS). The draft EIS analyzes five action alternatives to harvest 174 to 260 million board feet of timber from about 5,769 to 8,585 acres on northwest Revillagigedo Island 30 miles north of Ketchikan, Alaska.

Based on our review, we have rated the draft EIS EC-2 (Environmental Concerns - Insufficient Information). This rating and a summary of our comments will be published in the *Federal Register*.

Our primary concerns are for the sale's impact on water quality. We are concerned that assuring that best management practices are implemented may not ensure that the Alaska Water Quality Standards (WQS) are being met. Water quality monitoring is required to ensure compliance with WQS. WQS may be exceeded as a result of the proposed sale. Additional information is needed on effectiveness monitoring from the water quality effects of timber harvest and road construction. The enclosure provides additional comments and details.

Thank you for the opportunity to review this draft EIS. Please contact Wayne Elson at (206) 553-1463 if you have any questions about our comments.

Sincerely,

Kathy Veit

Kathy Veit, Chief
Program Coordination Branch

Enclosure

cc: Jim Ferguson, ADEC
Duane Peterson, NMFS
ADFG

Detailed Comments for
North Revilla
Ketchikan Pulp Company Long-Term Timber Sale Contract
Draft Environmental Impact Statement (draft EIS)

Monitoring

The text indicates that a best management practice (BMP) implementation monitoring strategy is under development for the Ketchikan area (page 2-42) and an effectiveness monitoring program for water quality and fish habitat is being developed on a forest-wide basis (page 2-59). We are concerned because a detailed implementation and effectiveness monitoring plan is not included in the draft EIS. This lack of detailed monitoring information precludes reviewers from influencing the scope of the monitoring plan and whether BMPs are likely to be effective in protecting beneficial uses and meeting water quality standards (WQS).

Monitoring is particularly important for a project of this magnitude, because it provides a check on the predictions of effects for the action alternatives. It is important to evaluate the effectiveness of planned mitigation measures to protect potentially affected resources. 2

Some monitoring information is included in the draft EIS. The final EIS should include types of surveys, location and frequency of sampling, parameters to be monitored, indicator species, budget, procedures for using data or results in plan implementation, and availability of results to interested and affected groups. A helpful document has recently been completed for developing water quality monitoring plans: *Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska*, EPA/910/9-91-001, May 1991.

The final EIS needs to include a feedback mechanism which relies upon monitoring so that standards and guidelines, BMPs, standard operation procedures, intensity of monitoring, and timber sale administration are adjusted when effectiveness monitoring indicates a need. Providing such a process for adjustment will ensure that mitigation measures will improve in the future and that unforeseen effects are recognized and minimized.

Water Quality Standards

A discussion is provided on Alaska WQS in the Chapter 3 of the draft EIS. Timber harvest and road construction will affect water quality. From reviewing the EIS we are unable to determine how the action alternatives will be consistent with the sediment standard. However, the responsibility is on the Forest Service to demonstrate in advance that timber harvest and road construction will not cause beneficial use impairment and cause standards exceedances.

The relationship between WQS and BMPs is discussed on pages 2-19, and 3-14. The draft EIS implies that WQS will be met if BMPs are implemented. The draft EIS could be misinterpreted and should be rephrased. To quote the *Water Quality Standards Handbook*, "It is intended that proper installation of State approved BMPs

will achieve water quality standards. Therefore, water quality standards are to be used to measure the effectiveness of BMPs."

In other words, the WQS are the measures by which BMPs are judged to achieve water quality protection. WQS consist of both designated beneficial uses and the water quality criteria necessary to protect those uses, as well as an antidegradation component. The antidegradation policy explicitly lays out that existing beneficial uses must be fully protected.

Therefore, BMP implementation does not equal standard compliance. The key issue is that effectiveness monitoring has not been developed on the Tongass National Forest, Ketchikan Area. Assurances of compliance with WQS through BMP implementation is not meaningful with this fundamental monitoring link missing. BMPs are assumed to protect water quality, but must be monitored to determine that this is the case. If they are not protective, then the BMPs must be revised. 29

Antidegradation

EPA believes that the proposed project could exceed WQS so that the fisheries beneficial use will not be fully maintained, therefore violating the federal antidegradation policy. An antidegradation analysis, as specified in the Antidegradation Policy [40 CFR 131.12] should be included in the final EIS. This policy was developed to achieve the goals of the Clean Water Act, which are to restore and maintain the chemical, physical and biological integrity of the nation's waters.

The Antidegradation Policy describes three tiers of protection. Briefly:

Tier 1:
No activity is allowable which would <u>partially</u> or completely eliminate any existing beneficial use of a waterbody, whether or not that use is designated in a state's WQSs. If an activity will cause partial or complete elimination of a beneficial use, it must be avoided or adequate mitigation/preventive measures must be taken to ensure that the existing uses and the water quality to protect those uses will be fully maintained. 24

Tier 2:
Where the quality of the waters exceed "fishable/swimmable" levels ("high quality waters"), that quality shall be maintained and protected unless the following are completed:

1) a finding that such degradation is necessary to accommodate important economic or social development in the area in which the waters are located.
2) full satisfaction of all intergovernmental coordination and public participation provisions, and

3) assurance that the highest statutory and regulatory requirements and BMPs for pollutant controls are achieved.

Please note that this provision is intended to provide relief only in extraordinary circumstances where the economic and social need for the activity clearly outweighs the benefit of maintaining water quality above that required for "fishable/swimmable" water. The burden of demonstration on the party proposing such activity is very high. In any case, the activity shall not preclude the maintenance of a "fishable/swimmable" level of water quality protection.

Tier 3:
Where "high quality waters" constitute outstanding national resources, that water shall be maintained and protected. As with the other tiers, the state determines the "tier" of the waterbody. If necessary, EPA will provide guidance on determining water quality status.

Federal Consistency Provisions of Section 319 of the Clean Water Act

The final EIS needs to fully integrate Section 319. Existing water quality conditions in the National Environmental Policy Act documents need to reflect and reference the state's water quality assessment. Direct or indirect nonpoint source water quality effects need to be reduced through design and through mitigation measures to insure that the project is consistent with the state's nonpoint source program. The contact for the Alaska Department of Conservation is: 32

Drew Grant
Nonpoint Source Coordinator
Alaska Department of Environmental Conservation
P.O. Box O
Juneau, Alaska 99811
Phone: (907) 465-2653

Air Quality

From 3 to 12 tons of PM_{10} emissions are predicted from prescribed burning (page 3-9). Additional information regarding the location and frequency of prescribed burning activities and the potential downwind air quality effects is needed. Particulate concentrations that exceed health standards have been measured up to three miles downwind of a prescribed burn. Residences, recreation sites, Forest Service recreation cabins, or areas of expected human activity potentially affected by burning activity should be identified in the draft EIS. 3

A air quality analysis should be completed that includes the following steps (portions of some of these steps have already been completed):

(1) An assessment of the need for burning as compared to alternate site preparation methods, such as scarification, PUM (piling unmerchantable material), and YUM (Yarding unmerchantable material);

(2) Quantification of the amounts, types of material and acreage to be burned;

(3) Description of the type(s) of burns proposed (e.g., broadcast burns, piled burns, understory burns);

(4) Description of measures to reduce emissions (e.g., management of fuel moisture content, site preparation, fuel removal through firewood programs);

(5) Quantification of emissions of regulated air pollutants;

(6) Description of applicable regulatory and/or permit requirements, including smoke management plans;

(7) Qualitative description of air quality impacts focused on new or increased impacts on downwind communities and visibility impacts; and

(8) Modeling of downwind concentrations of pollutants to document compliance with NAAQS, PSD increments (if applicable), and visibility impacts (if affected).

Modeling

We acknowledge that air quality modeling of emissions from prescribed burning in mountainous terrain is a difficult problem. We recommend that the best model available be utilized considering such aspects as location, terrain, type of burn, and direction and distance to critical receptors. EPA Region 10 and Forest Service Regional Offices are having ongoing discussions to develop more specific prescribed burning modeling guidance. The Forest Service regional air quality specialist should be contacted for the latest information. It should be noted that steps 1 through 7 above can be completed without modeling. The information from these steps should be included in the draft EIS since it provides useful information about air quality impacts and timber sale planning.

Class II Airshed

The draft EIS needs to address two air quality issues for Class II airsheds: the NAAQS for particulate matter less than 10 microns (PM_{10}) and the PSD Total Suspended Particulate increments. Neither the NAAQS nor the PSD increments may be violated.

In addition, the draft EIS should describe meteorological conditions and existing air quality, using data applicable to the project site. If the analysis indicates that potential exceedances could exist, reductions in particulates from burning activities may be necessary. The air quality analysis must demonstrate that the proposed action will not cause or contribute to any violations of the NAAQS, that it will not cause air quality to degrade by more than any applicable Class II PSD increments, and it will not cause or contribute to visibility impairment.

In certain situations modeling of the PSD increment can be "short cut" if the emission rates are below de minimis levels. If the PSD increment is protected, it follows that the NAAQS will be protected. If the emission rates are above the de minimis cutoff, dispersion modeling must be performed.

Page Specific Comments

2-12 Up to 54.4 million board feet or about 21 percent may be helicopter logged. The final EIS should indicate the number of days and the hours of helicopter operation. Helicopters at 500 feet are comparable to sound levels of heavy trucks and city buses heard from the street, which could be considered a significant impact in areas with very low ambient noise levels. For example: Forest Service recreation cabins at Blind Pass, Plenty Cutthroat, and Orchard Lake (page 3-11). The levels and character of noise that would be expected from helicopter operations in the vicinity should be described. A source of information for noise effects of helicopters in non-urban areas is the *National Surface Water Survey - Western Wilderness Area Lakes, Environmental Assessment*, EPA 910/9-85-126, April 1985. Copies of this document may be borrowed from the EPA, Region 10 library, at (206) 553-1289.

2-42 Concerning effectiveness monitoring of BMPs, how many stream miles will be monitored for this project?

2-43 Slope stabilization is not included in the effectiveness monitoring section. How will slope stabilization plans that fail be corrected?

2-44 What assumptions are made for the success of erosion control to meeting water quality objectives relative to size of storm events?

2-49 How will implementation of needed stream-crossing structure improvements be assured?

2-50 In connection with validation monitoring, are there models being used to support environmental effects assumptions used in this draft EIS? Is there validation monitoring to support the fish habitat capability models, for example? If so, validation monitoring for them should be discussed.

3-12 Will any water supply watershed be affected by this project?

3-14 The draft EIS relates project effects to the draft Tongass Land Management Plan Revision (August 1991) standard and guideline on cumulative watershed effects (CWEs). Page 4-63 of the draft revision states, "Limit large scale ground-disturbing activities and associated roading to no more than 35 percent of the acres of 3rd order or larger watersheds in less than a 15-year period unless a cumulative watershed effects analysis during project planning indicates otherwise." (While this standard and guideline may change in the final revision we agree that it is useful to relate it to ongoing projects.) Reliance on this rule of thumb without a true watershed cumulative effects analysis necessarily imposes an obligation to include a larger safety factor than might otherwise be used in selection and monitoring of BMPs.

3-17 As well as acres of road construction and watershed disturbance the final EIS should discuss the effect of roads in the context of road density. Road density can be an indicator. Their effects are more persistent over time. In a study of the lower ends of 44 basins it was found that when the roaded area exceeded 2-3 percent of the subbasin area, the accumulations of sediment were most pronounced.[1] What percent of roads are there currently in watersheds? What percent is expected in the alternatives?

3-29 We suggest that the percentage of high mass movement index soils harvested in each value comparison unit (VCU) by alternative also be included in the final EIS. This analysis indicates whether a large proportion of a single watershed would be affected by high landslide hazard, percentage of watershed disturbed, and resulting adverse water quality effects. We note that about 29 percent of the project area is on high mass movement soils.

What percent of ground-disturbing activities in 3rd order watersheds are proposed by alternative in the North Revilla project?

How closely do VCUs compare to 3rd order watersheds?

The 35 percent threshold is based on studies in the Staney Creek Watershed. How closely does the North Revilla project area resemble the Staney Creek Watershed? How are they different?

3-48 Class I and II streams will have 100 foot buffers, however it is not clear what buffering, if any will be placed around Class III streams. There are 240 Class III stream miles potentially affected. We are concerned that WQSs will not be met and beneficial uses may not be protected because the draft EIS provides less protection for Class III or first and second order (headwater intermittent

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[1]Cederholm, C. J., Salo, E. O. *The effects of landslide siltation on salmon and trout spawning gravels of Stedauleho Creek and Clearwater River Basin*, Jefferson County, Washington, 1972-1978: Seattle WA: 1979.

and perennial) streams. The final EIS needs to include full protection of first and second order streams.

These first and second order streams are important in maintaining downstream system integrity and water quality as well as providing fisheries and amphibian habitat/refugia. Disturbed first and second order streams may become sediment sources to downstream areas. In addition, loss of woody vegetation along these headwater streams may eventually lead to reduced large organic debris in downstream reaches. The greatest opportunity for improving stream conditions through BMPs may be on first and second order streams. 2

3-59 The text here an on page 2-19 that the proposed timber harvest will have no measurable effects on fish habitat capability. This should be supported with effectiveness monitoring from other similar project areas. 7

3-358 It is not clear from the discussion on effects from log transfer facilities (LTF) how significant the incremental effects from use of existing LTFs compares to the proposed three new LTFs. This should be discussed in the final EIS.

SUMMARY OF THE EPA RATING SYSTEM FOR DRAFT ENVIRONMENTAL IMPACT STATEMENTS: DEFINITIONS AND FOLLOW-UP ACTION *

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA intends to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

February, 1987

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

869

February 10, 1993

Mr. David Arrasmith
IDT Planning Staff Officer
USDA Forest Service
Ketchikan Area, Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

The National Marine Fisheries Service has reviewed the Draft Environmental Impact Statement (EIS) for the Ketchikan Pulp Company Long-term Timber Sale Contract for the North Revilla Project Area, December 1992. We have the following comments.

Volume I, Chapter 3, page 106 and elsewhere, Steller is misspelled.

In Volume I, Chapter 3, page 109, the Forest-wide standards and guidelines that will be followed for Steller sea lion are left out.

The purpose of the harbor seal discussion on page 110 of Volume I, Chapter 3, is unclear. Harbor seals are not currently listed as threatened or endangered. Logically the species could be considered sensitive according to the definition given on page 105.

In Volume I, Chapter 3, page 354, the narrative for NW Traitors: Site No. 18 misrepresents the results and recommendations contained in the June 17, 1992, NMFS and Fish and Wildlife Service report. It would be better to quote the report as follows:

> This site is very productive in terms of biomass. Plant and animal species are diverse and numerous. This site does not meet the Timber Task Force LTF siting guidelines, including the criteria for water depth, site productivity, and potential bark accumulation. We do not recommend construction of a LTF at this site. However, if the LTF is moved to the southwest shore of the bight the footprint of the LTF would be significantly smaller. This would reduce the bottom area covered which will reduce the effects of LTF construction on the aquatic environment.

In Volume I, Chapter 3, page 370, the determination is made that there will be no adverse impacts to any Federally listed threatened and endangered species. We concur with that determination.

We appreciate the opportunity to review the document. Please send us the final EIS and record of decision when they are available.

Sincerely,

Steven Pennoyer
Director, Alaska Region

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Alaska State Legislature

Senate Majority Leader
Chair, Judiciary Committee
Vice Chair, Community & Regional Affairs

Member, State Affairs Committee
Committee on Committees
Western States Legislative Forestry Task Force
Legislative Council

Senator Robin L. Taylor

State Capitol
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(907) 465-3873
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352 Front Street
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February 9, 1993

Mr. Dave Arrasmith, IDT Planning Staff Officer
Ketchikan Administrative Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith:

I am writing to express support for Alternative's 2 and 5 of the North Revilla Draft Environmental Impact Statement. These alternatives, besides meeting the supply of timber for Ketchikan Pulp Company, will assist the long term economic health of Ketchikan and the region. 1

The road links that would be established in these two alternatives will aid the efforts of the community of Ketchikan to build a road off the island and build an affordable energy transmission grid to the Tyee Lake Hydroelectric project. 9

Construction costs for power lines are substantially reduced when roads are present. Their presence helps avoid helicopter construction that can make intertie building cost prohibitive. The Swan Lake Hydroelectric facility is nearing peak capacity. Ketchikan may soon need to add additional diesel capacity to meet the demands in the area. —

Concurrently, the federal Clean Air Act will place pollution control regulations on the energy production industry. The proposed road and corridor could help alleviate many of these concerns and the associated costly regulations that would negatively impact the consumer in the Ketchikan area. —

These two alternatives appear to be the best for my constituents. Either will help provide economic stability through an assured timber supply, a less costly route for energy transmission, and part of the future road link with the mainland, Wrangell, and in the future the continental road system in British Columbia, Canada. 16

On behalf of my constituents in Ketchikan, Saxman, and Wrangell I urge the adoption of either Alternative 2 or 5 of the North Revilla Draft Environmental Impact Statement.

Sincerely,

Robin L. Taylor

RLT:tco

cc: Representative Bill Williams
Paul Rusanowski, DGC
Commissioner Paul Fuhs, Dept. of Commerce
Commissioner Glen Olds, DNR

866

X

City of Ketchikan

334 Front Street
Ketchikan, Alaska 99901
907-225-3111

February 9, 1993

Mr. David Arrasmith, IDT Planning Staff Officer
Ketchikan Area, Tongass National Forest
U.S. Forest Service
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith:

We, the elected representatives of the people of Ketchikan, would like to add our comments to the North Revilla timber sale draft EIS.

Our comments are general, supporting goals of the community.

They are:

- That roads be designed to accommodate future use as power corridors for a power intertie between Swan Lake, which serves Ketchikan, and Tyee Lake which serves Wrangell and Petersburg.

- That roads serving the sale, log dumps and other development be designed for easy access to recreation sites for area residents and visitors after logging is complete.

We also suggest in your future timber planning that consideration be given to developing timber sales and roads which will connect the Ketchikan road system to that of the North Revilla sale area.

Sincerely yours,

Ketchikan City Council
By
Alaire E. Stanton
Alaire E. Stanton
Mayor

867

United States Department of the Interior

TAKE PRIDE IN AMERICA

OFFICE OF THE SECRETARY
Office of Environmental Affairs
1689 C Street, Room 119
Anchorage, Alaska 99501-5126

February 9, 1993

ER #92/1189

Mr. David Arrasmith, IDT Planning Staff Officer
Ketchikan Area, Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith:

We have reviewed the Draft Environmental Impact Statement (DEIS) concerning the December 1992, U.S. Forest Service, Tongass National Forest, Ketchikan Pulp Company Long-Term Timber Sale Contract, North Revilla Project Area. We offer the following comments for your consideration.

General Comments

The Bureau of Mines' Minerals Availability System (MAS) database documents that there are two historic mineral locations that fall within the North Revilla boundaries. These include:

1) Teller Mine	T71S R90E Sec 21	Gold prospect	Low potential
2) St. Francis	T52S R90E Sec 13	Gold prospect	Medium potential

The MAS also contains two historic rockpit locations, one at Traitors Cove, the other at Neets Bay. There is one active claim in the area as of August 29, 1992, listed on the Bureau of Land Management mining claim microfiche file. This claim is the Ruth J. and its location is analogous to the St. Francis location given above. The Bureau does not anticipate conflicts between future mineral development and the proposed logging developments.

We believe the DEIS should address the potential for geomorphological change related to road building and logging. Specifically, slope instability and failure can result due to the inherent structural nature of the rocks.

Cumulative Effects. The DEIS should be expanded to adequately address the cumulative effects that the proposed action, in conjunction with adjacent past, currently proposed, and anticipated future timber sales, will have on wildlife populations and local sport and subsistence harvest. Cumulative, permanent losses in wildlife habitat anticipated for the proposed area from now until the year 2140 are significant. Reductions of management indicator species stated in the Draft are: Sitka black-tailed deer (76%), marten (62%), hairy woodpecker (79%), and brown creeper (88%). Because little baseline information is available for these local Revillagigedo Island populations, documentation of losses of these species and the guilds they represent is needed. Furthermore, the cumulative impacts on fish and wildlife from this proposed action and all the timber harvests throughout Tongass National Forest need to be addressed.

Alternatives. The DEIS does not present a full range of alternatives. All of the harvest alternatives entail a high board foot output, from 174 to 251 million board feet. We believe the other alternatives, including less than the 200 million board foot timber target, should be analyzed.

Threatened and Endangered Species. The DEIS lists several threatened and endangered species for which the Fish and Wildlife Service has responsibility under the Endangered Species Act, including the endangered American peregrine falcon, Aleutian Canada goose, and Eskimo curlew. The Arctic peregrine falcon (Falco peregrinus tundris) could occur in the area as a seasonal migrant and should be added to the list of threatened species. The above birds may occur in the timber harvest area only as seasonal migrants; therefore,it is not expected for these species to be adversely affected by the proposed project.

Candidate Species. The marbled murrelet and northern goshawk are typically associated with old-growth forest habitat, which provides one or more critical elements of their life requirements. The proposed action would result in loss of such habitat and is likely to have significant adverse impacts on local populations of these species on Revillagigedo Island.

In light of the need for further status review of the harlequin duck (Histrionicus histrionicus), we recommend that this species be added to the Final EIS list of Category 2 candidate species within the Revilla Project Area. Harlequin ducks nest adjacent to inland streams and rivers and commonly use nearshore coastal waters throughout the year. The effect of the proposed actions on harlequin ducks would depend on the nature and time of site specific land treatment. Disturbances near stream habitats, particularly during the nesting period, would adversely impact harlequin ducks within the action area.

The DEIS states that four days were spent checking for the presence of the spotted frog (Rana pretiosa). The Fish and Wildlife Service is reviewing the status of this organism and is currently conducting studies on its range and abundance in southeast Alaska. The Fish and Wildlife Service would like to review the data collected by the Forest Service and offer its expertise in determining the presence of the spotted frog in the Revilla project area. Four days of surveying is a limited amount of time to determine the presence of frogs, depending on the amount of suitable habitat.

The DEIS states that no plant species known to occur in the area have been determined to be threatened, endangered, or sensitive. There may be some Category 2 plant species occurring in the project area, including Calamagrostis crassiglumis and Carex lenticularis var. dolia. These and other plant species of concern should be reviewed and discussed in the Final EIS.

Old-Growth. By the year 2140 only 23,000 (31 percent) of the original old growth will remain in the project area, according to the DEIS. The DEIS recognizes and describes the values that old-growth forest habitat contribute to the well-being of habitats and wildlife resources. However, the document does not treat old-growth forest as a non-renewable resource and lacks commitment to protection of old-growth areas. The DEIS presents a scenario that only a small portion of old-growth forest will be lost during this proposed timber sale. However, it also describes the future of old-growth blocks in the Revilla project area as being increasingly reduced and fragmented. We recommend the section on cumulative effects be revised to reflect the impacts that such a decrease and fragmentation of old-growth will have on the aquatic and terrestrial habitats, fish and wildlife resources, and the entire local ecosystem.

We believe the DEIS should identify previously allocated old-growth wildlife retention areas located in the project area. If any of these areas are to be harvested, the rationale behind why these areas are no longer considered necessary for maintaining wildlife values should be presented for public review.

Log Transfer Facilities (LTF): This DEIS also describes, to some degree, impacts that can be expected from operation of an LTF. The DEIS, however,

minimizes and underestimates the potential impact on marine and estuarine resources. Water disperses impacts over a much broader area than the actual site of any discharge. An LTF will result in significant amounts of woodwaste and other non-point source pollutants, such as petroleum products, construction and operationally induced turbidity and siltation, and organic leachates from upland woodwaste. These discharges impact water quality and associated fish and wildlife habitats. Operational activities at logging camps and LTF sites will cause some species of migratory birds and other wildlife to avoid these high value habitat areas. Turbidity and other pollutants can adversely affect salmon fry which rear in, and migrate through these protected nearshore areas. Other planktonic, demersal, and benthic marine organisms can also be adversely affected. Productive aquatic kelp and eelgrass beds can be degraded or eliminated in the vicinity of an LTF.

As stated in the May 11-14, 1992, National Marine Fisheries Service and the U.S. Fish and Wildlife Service Report of Field Investigations, the recommendations of the proposed LTF sites in the project area were based upon observations of estuarine habitat made during a limited time period. Seasonal fish and shellfish use and spawning occurrences were not observed at that time, but these resources warrant further consideration and study. We suggest that the Alaska Department of Fish and Game be consulted in this regard and alternate LTF sites be considered, if necessary.

Marine Environment: The DEIS describes, in part, the affected marine environment for this project. However, it does not recognize the importance of the shallow water areas to the viability of marine/estuarine ecosystems. Shallow waters are where the energy from the sunlight is greatest and where the resultant transformation of that energy to primary production, the foundation of all ecosystems, is the most efficient. That principle should be discussed in the Final EIS and included in the evaluation of impacts.

Harvesting Beyond Unit Boundaries: As per the September 23, 1992, Alaska Department Fish and Game Report, some timber harvest units have been expanded beyond unit boundaries shown in the Forest Service NEPA documents for past timber sales. This practice precludes comprehensive project impact evaluation and prevents reviewing agencies or the public from commenting as required by the NEPA process. We request that resource agencies and the public be afforded an opportunity to comment on any planned expansion of harvest units in the Revilla timber sale area that are not covered by this document.

Specific Comments

Table of Contents. We suggest the Table of Contents be further subdivided to facilitate reader orientation.

Chapter 2, page 33, KV Maintenance. Precommercial thinning to pay for mitigation of wildlife habitat loss results in major additional losses of habitat values. The fish and wildlife resource impacts of these activities should be quantified and fully addressed in the Final EIS.

Chapter 2, page 41, Monitoring. Plans for monitoring wildlife habitat or nest sites states the Corrective Action is simply consulting with someone. The Final EIS should include plans for implementation of mitigation if timber activity violates the stipulations, regulations, or restrictions stated in State and Federal permits. For example, the Final EIS should generally state what kind of corrective action will be taken if the unit's beach fringe, estuary fringe, and riparian habitat goals are not met after harvest. These terms should be stated on the contract also. Each unit is different, but a unit-specific statement of "on the ground" mitigation should be included.

Chapter 2, page 45, Eagle Nesting Habitat Monitoring. Criteria for the disturbance threshold of a bald eagle nest should ensure that remedial

response occurs before nesting ceases. Close, continued monitoring will be needed to detect eagle behavior indicating nest disturbance prior to nest abandonment. The Fish and Wildlife Service should be consulted prior to on-the-ground activities.

Caution should be taken to avoid disturbing the two eagle nests located near the existing LTF site on Hassler Island and the proposed road from this site leading to unit 5015. Another eagle nest is located close to LTF site No. 18.

Chapter 3, page 44, Cumulative Effects. The DEIS states that by maintaining riparian areas, floodplains, and wetland values and functions in the upcoming decades, the cumulative effects of these actions will remain within threshold levels. The Final EIS should define the threshold level and the criteria used to establish it and explain how the values and functions of wetlands will be maintained if these areas are scheduled to be harvested.

Chapter 3, page 55, paragraph 3. Table 3-22 should read Table 3-21.

Chapter 3, page 56, paragraph 1. The fourth sentence could be construed to mean that spawning gravel quality is important only for pink and sockeye salmon rather than all salmonids. We recommend that the sentence be reworded to reflect the importance of spawning gravel to all species of salmonids that occur in the project area.

Chapter 3, page 60, Table 3-24. The total percentage for the year 2140 should read +144.

Chapter 3, page 61, Table 3-26. The percentages in this table are inconsistent with other tables in that no positive or negative signs are utilized.

Chapter 3, page 61, paragraph 2. The second sentence appears to be incomplete and should be corrected.

Chapter 3, page 92, paragraph 4. We agree that increasing forest edge will not always maximize diversity. The species requiring large old-growth stands should be considered when planning development projects. Fragmentation of old and mature forests is a major concern of the Fish and Wildlife Service as it impacts population viability of several animal species, including the northern goshawk, marbled murrelet, some neotropical birds and Sitka black-tailed deer. All the Alternatives propose further fragmentation of the forest. Timber harvest units should be located and selective cutting used to minimize forest fragmentation. Selective cutting of single trees above a certain size would maintain diversity of habitats and a multiple-canopy structure, as well as produce minimal habitat destruction by leaving only single tree openings that simulate natural fall of old trees. High grading timber stands should be avoided; some large, healthy trees should be left standing and at least a 60 percent canopy cover maintained. If clear cuts are used, small units close together are desired compared to scattering harvest units, which would have a greater adverse impact on species sensitive to edge effect.

Chapter 3, page 93 and 95, Ecological Province. The DEIS makes the assumption that Misty Fjords National Monument Wilderness area will provide wildlife habitat connection because it is in a natural un-roaded state. The natural state of the wilderness area does not necessarily supply quality habitat required by old-growth dependent species.

Chapter 3, page 97, paragraph 1. The DEIS understates the effects that overharvesting timber stands can have on species requiring large tracts of old-growth habitat, such as the northern goshawk and marten. These species require more than "at least a partially intact mature forest canopy" to be "successful." The term "successful" used in this context should be defined.

Chapter 3, page 101 - 103. These maps showing comparisons of old-growth patches between alternatives is an excellent demonstration of the amount of old-growth habitat fragmentation that will result from completion of this project. Timber harvest units should be located and selective cutting used to minimize forest fragmentation.

Chapter 3, page 107, Marbled Murrelet. The statement in the DEIS giving marbled murrelet population estimates is incorrect. Kessell and Gibson 1978, reported 250,000 marbled murrelets in Prince William Sound, not Southeast Alaska. It was J.W. Nelson and W.A. Lehnhausen (1983) that reported 250,000 for Southeast Alaska. Data are not sufficient to substantiate the 250,000 population. The most recent 1992 murrelet population estimates by Fish and Wildlife Service personnel are a minimum of 124,000 murrelets in all Alaska, including Prince William Sound, Kodiak, and the Kenai area (USFWS briefing statement, September 1992). These estimates include Kittlitz's murrelets (Brachyramphus brevirostris) due to difficulty distinguishing between the two species in the field. A large scale, cooperative effort is needed to establish scientifically sound population estimates for Southeast Alaska. Ongoing studies are being conducted.

Chapter 3, page 108, Northern Goshawk. We advise the Forest Service adopt the Interagency Goshawk Committee recommendations for the management of documented and suspected goshawk nest sites. Protection of individual nest sites in only a short-term strategy and may not succeed in protecting goshawk populations. We recommend the adoption of large-scale habitat protection such as described by the Interagency Viable Populations Committee's report. We recommend continued monitoring of the northern goshawks in the project area, and prompt amendment of management guidelines as indicated by the findings.

Chapter 3, page 111, paragraph 2. We agree there is insufficient evidence to conclude to what extent the marbled murrelet would be adversely affected. However, based on current information, we believe that murrelets, as an old-growth dependent species, will be adversely affected by the extensive timber harvest proposed. At this time we do not conclusively know that a 30-acre buffer around a marbled murrelet nest is sufficient to protect and maintain the use of an area by murrelets. We recommend that murrelet nesting in areas be documented through the detection of occupation behavior, as described in the most recent protocol by Forest Service researcher C.J. Ralph and U.S. Fish and Wildlife Service, Oregon Coop. Research Unit biologist K. Nelson. Most murrelet researchers appear to agree that the larger an area of suitable habitat maintained for murrelet nests, the better. Fragmentation of the forested area and increased edge effect raises the probability of avian predation on murrelet eggs and young. Predators on murrelets include crows, jays and owls. We believe that additional data from ongoing studies are needed to quantify impacts on murrelets.

Chapter 3, page 351, Chin Point. In the first sentence, delete "northeastern" and substitute "northwestern."

Chapter 3, page 354, paragraph 7. We disagree with the second sentence in this paragraph. LTF Site No. 22 was not considered biologically acceptable by the Fish and Wildlife Service. As stated in the Report of Field Investigation, this site is very productive biologically and does not meet the Timber Task Force LTF guidelines. This site was considered the "least damaging of the sites investigated at the time. If a more suitable existing or proposed site is available, we recommend the Forest Service use it as an alternative.

Chapter 3, page 358, Effects of LTF's. We question that the proposed LTF sites were designed to maximize flushing suspended bark away from the LTF area to the open sea before it can accumulate on the bottom. Often, sufficient

flushing cannot be provided at sites. The selection of such sites is often based on the criterion of low productivity in lieu of maximum flushing.

Summary

We believe permanent, cumulative losses in old-growth habitat anticipated for the proposed area to the year 2140 is significant. We recommend that the Forest Service use habitat conservation areas in all alternatives, in accordance with the Interagency Viable Populations Committee report to assure the viability of wildlife populations in the project area. The DEIS does not have a full range of action alternatives that give important issues, other than timber production, equal consideration.

We offer our assistance to the Forest Service during any further planning, specifically relating to:

- The location and operation of any undetermined log transfer facility;
- spotted frog populations;
- identification of bald eagle nest locations
- marbled murrelet populations; and,
- conduct of waterfowl surveys.

We are interested in participating in an interagency meeting and/or field evaluation that may be conducted, and wish to receive updates on the progress of sale planning. We also request that copies of any completed or continuing preliminary wildlife studies for the Revilla timber sale be sent to this office prior to the completion of the Final EIS. We appreciate the opportunity to comment on this document. If clarification regarding fish and wildlife related comments is needed, please contact the Fish and Wildlife Service's Juneau Ecological Services Office at 907/586-7240.

Sincerely,

Regional Environmental Officer
Alaska

868

Greater Ketchikan Chamber of Commerce
p.O. Box 5957, Ketchikan, Alaska 99901
(907) 225-3184

January 28, 1993

David Arrasmith, IDT Planning Staff Officer
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, AK 99901

Dear Mr. Arrasmith:

We would like to offer our comments on the alternatives considered in the North Revilla Draft EIS.

It is our opinion that timber harvest on North Revilla is an appropriate use of the timber resources there. The existing and proposed log transfer facilities allow rafting and towing to occur in the relatively sheltered waters of Behm Canal. The towing distance to the pulp and saw mills in Ward Cove is minimal by comparison to other potential cutting units in the Tongass. The work can be outfitted and supplied directly from Ketchikan. These things add up to benefits to logging in this general area which are in addition to those in your DEIS.

We are in favor of Alternative 6, with several modifications. There are several reasons that we favor this alternative.

The first is economics. Overall, Alternative 6 offers the most return to the log with estimated stumpage of $40.16 per thousand board feet. We are not only residents of this area, but also citizens of the United States, and are in favor of an action with so significant an economic advantage as this stumpage has over the closest alternative at $31.26. We especially like the internal economics of Alternative 6 in which both proposed new road construction and proposed road reconstruction are lower than other alternatives, and result in the highest timber volume per mile. Additionally, the number of harvest units achieves among the best harvest productivity per unit, bettered only by Alternative 4. These factors result in many tangible and intangible benefits, including a minimal impact on the land. The higher the utilization of the roads, landings and other improvements associated with each unit, the more efficient the operation.

The second reason we prefer Alternative 6 is that it "scores" very well in the other areas considered important in evaluating the impacts of timber harvest. It minimizes class I and II stream crossings, maximizes the retention of unfragmented old-growth blocks, and maximizes habitat preservation, while still allowing for a viable timber program. In short, this is the best example of a "multiple-use" alternative.

We would like to propose two modifications to Alternative 6. The first is the Margaret/Traitor's Creek road connection that would allow several units in the Traitor's Creek area to be transported to the existing log transfer facility in Traitors Cove. The connection exists in Alternative 2 and we think it improves the efficiency and safety of Alternative 6.

Additionally, we would like to propose an additional road connection between units 8056, 8057, 8045, and 8058 and the units immediately to the north. In this way, logs from the identified units could be watered at the South Neets Bay LTF, eliminating the need for a new LTF on State owned land in Traitors Cove.

Finally, we urge you to use moderation in the final unit layout on Hassler Island. It is difficult to tell from the Alternative Maps what the visual impacts in this area will be. While we generally favor the use of all the Value Comparison Units in the project area for some timber harvest, we recognize the high recreation use of Gedney and Hassler Passes. The layouts in Alternative 6 do not appear to result in a serious visual impact from the water, but we were unable to verify this during this comment period. We do not want modifications to Hassler to reduce the total volume scheduled for harvest. If any reductions are made from Hassler Island they should be replaced with volume on Revilla.

We commend you for the approach taken in this DEIS. The alternatives provided us with clear choices, all of which accomplished your stated objective of providing 200 MBF for harvest.

Thank you for the opportunity to comment.

Sincerely,

Nancy Watt
President
Greater Ketchikan Chamber of Commerce

Received late

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Alaska State Legislature

Official Business

HOUSE OF REPRESENTATIVES
REPRESENTIVE WILLIAM K. WILLIAMS

State Capitol
Juneau, Alaska 99801-1182

February 12, 1993

Mr. Dave Arrasmith, IDT Planning Staff Officer
Ketchikan Administrative Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith,

After reviewing the various options of the North Revilla Draft Environmental Impact Statement, I would like to express support for alternatives two and five. Because of the benefits that these alternatives would have for our economy (timber supply, additional area for tourism, & power intertie) they would seem to offer the greatest potential to our area.

9
6

If you have any questions, please feel free to contact me.

Sincerely,

Bill

Representative William K. Williams

Late WBN

870

Overall Economic Development Program

7th & Madison, Ketchikan, AK 99901

(907) 225-6171 Fax (907) 225-3895

February 18, 1993

David Arrasmith
IDT Planning Staff Officer, Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan Alaska 99901

Dear Mr. Arrasmith:

We have received the summary of the North Revilla Draft Environmental Impact Statement. It was reviewed by our Timber Subcommittee and questions and concerns were addressed by three representatives from the Forest Service: Steve Segovia, Bill Nightengale, and Tom Somrak.

The Subcommittee recommended the implementation of Alternative 6. The Overall Economic Development Program Committee was polled by phone regarding the subcommittee's resolution. It was approved by the OEDP by a vote of 13 for and one abstention. Several committee members stated that they regretted not having further time, however, to look at the various alternatives. #6

Thank you for the opportunity to comment on this issue which is so important to Ketchikan residents.

Sincerely yours,

The OEDP Committee
John Clifton, Chair

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KETCHIKAN GATEWAY BOROUGH
Office of the Borough Manager
344 Front Street
Ketchikan, Alaska 99901
(907) 228-6625

February 19, 1993

Mr. David Arrawsmith
Ketchikan Area, Tongass National Forest
Federal Building
Ketchikan, AK 99901

Subject: Comments on the North Revilla Draft EIS

Dear Mr. Arrawsmith:

Borough staff has reviewed the subject document for consistency with adopted Borough plans and policies. A draft of staff's review comments has been presented to the Borough Assembly, who in turn has endorsed the following comments and recommendations. A copy of these comments are being forwarded to the Division of Governmental Coordination as the Borough's formal review of the project proposals for consistency with the Ketchikan District Coastal Zone Management Program.

The current District Coastal Zone Management Program (July 1983) establishes a goal to direct land use planning "toward enhancing future economic development, opening new lands for development, and maintaining the diversity of lifestyles...." An objective under this goal seeks to "provide for a land use pattern that balances resource development with resource protection needs." Alternatives three through six appear to provide a balance between the development of timber resources and protection of other resource values.

The DEIS's analysis of socio-economic consequences of the various alternatives is inconclusive. Table Sum-12 identifies employment effects of the proposed action ranging from a low of 379 jobs (Alternative 3) to a high of 568 jobs (Alternative 2). Corresponding personal income estimates from these proposed alternatives range from 15.5 to 23.2 million. [The no action alternative is not considered in this discussion.]

What is not mentioned is the socio-economic effect of what appears to be a major shift in timber operations onto the Ketchikan Ranger

JC/L11

District. I understand that the recent harvest and sale volume on the District has been considerably below that of any of the development alternatives. Undoubtedly, many of the existing jobs that have been projected are already occupied in primary and secondary processing. How many of the logging and other primary support jobs will be new to the community?

It is recognized that many of the jobs will be stationed in remote logging camps. The introduction to the economic chapter of the DEIS suggests that the communities of Ketchikan, Metlakatla and Thorne Bay will be affected by the proposed action, however, there is no discussion nor data to support such a conclusion. It would be useful to have some estimate of possible new job creation which would be based in Ketchikan, perhaps relocated from other communities. Such information would be useful in planning a response to possible community based housing and other service needs, if necessary.

The economic section of the plan recognizes the role of consumptive and non-consumptive uses within the project area in the area's tourism economy. The Forest Service's analysis of the visual impact of analysis of alternatives is to be applauded. You are encouraged to coordinate closely with lodge operators and guides in managing visual impacts and protecting popular locations.

Many of these locations are also likely to be popular with Borough residents for sports activities or subsistence use. One such location of concern is the Virgin Bay State Land Selection. The proposed log transfer facility at this location may be detrimental to the objective of this selection as a state park. A log transfer facility can provide an opportunity for future recreation. The Borough defers to the Ketchikan State Parks Advisory Committee and the Department of Natural Resources in addressing this proposal.

The Borough recognizes that much of the project area has already been modified by prior harvest activity, harvest and road construction. The Borough is in need of additional added recreation opportunities. While it is unlikely that the project area could realistically address current needs, longer term prospects could provide for future recreation opportunities in the project area.

The Forest Service's determination that roaded access into the project area is not in the foreseeable future is realistic. At the same time, the Borough believes that it is necessary that the Forest Service consider the possibility that at some later date, a road corridor which you would construct as a part of this project, could be utilized as an alignment for an off-island road.

It is opportunities, such as presented with this project, that the community must use to it's advantage if it is ever going to attain it's goal of roaded access to the north end of Revilla Island. The proposed project area is 29 miles via study corridors identified in the Revillagigedo Island Corridor Study from the Leask Lakes Tract. The Assembly recently authorized the trade of entitlement land to obtain Leask Lakes. When considering the use of the Shelter Cove road system, construction of remaining segments is indeed achievable.

The Forest Service's suggestion regarding the use of Shrimp Bay via the Bluff Lakes Road as a ferry terminus was considered by the Borough Assembly and endorsed as a possible interim alignment in their review and adoption of the Corridor Study. The Borough Assembly remains committed to a northern terminus at Claude Point.

All of the proposed alternatives contain a proposal to construct roads into the Klam Creek drainage, above Klu Bay. Alternative 3 and 6 propose development of a 3 mile spur and Alternative 2 and 5 propose a 7 mile spur. This spur road follows the alignment of the adopted corridor road. The Forest Service is encouraged to incorporate the longer road corridor into the selected alternative and take measures in the design and construction of the road for protection and later conversion for use as a part of the off-island road.

Thank you for this opportunity to comments. If you have any questions, please do not hesitate to contact me or Gary Munsterman, Borough Planning Director at 228-6610.

Sincerely,

Michael Rody
Borough Manager

c Borough Assembly
Gary Munsterman, Planning Director
Division of Governmental Coordination

JC/L11

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ORGANIZED VILLAGE OF SAXMAN
"SAXMAN IRA COUNCIL"
2706 SOUTH TONGASS
ROUTE 2; BOX 2 - SAXMAN
KETCHIKAN, ALASKA 99901
MESSAGE PHONE (907) 225-4166
FAX PHONE (907) 225-6450

February 9, 1993

David Arrasmith, IDT Planning Staff Officer
Ketchikan Area - Tongass National Forest
Federal Building
Ketchikan, AK 99901

Dear Officer Arrasmith,

Enclosed please find our proposal form regarding the Draft Environmental Impact Statement for the Ketchikan Pulp Company's Long Term Timber Sale Contract for The North Revillagigedo Project Area.

Also included is a resolution passed by the Saxman IRA Council regarding this matter.

Thank you for the opportunity to comment and if further information is desired you can contact me at the above address.

Sincerely,

Nora DeWitt

Nora DeWitt,
President

c: Mr. David Rittenhouse, Area Supervisor

ORGANIZED VILLAGE OF SAXMAN
"SAXMAN IRA COUNCIL"
ROUTE 2, BOX 2 - SAXMAN
2706 SOUTH TONGASS
KETCHIKAN, ALASKA 99901
Phone: (907) 225-4166

RESOLUTION #93-02-001

A RESOLUTION OF THE IRA COUNCIL OF THE ORGANIZED VILLAGE OF SAXMAN, ALASKA OPPOSING THE SUBSISTENCE FINDINGS IN THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE KETCHIKAN PULP COMPANY'S LONG TERM TIMBER SALE CONTRACT FOR THE NORTH REVILLAGIGEDO PROJECT AREA.

WHEREAS, The Organized Village of Saxman is a duly constituted Indian Tribe organized pursuant to the authority of the Acts of Congress in the Indian Reorganization Act and such legislation of June 18, 1934 (48 Stat. 984) and May 1, 1936 (46 Stat. 1250); and

WHEREAS, The Organized Village of Saxman being the federally recognized Tribe of Saxman is governed by the Saxman IRA Council and has authority to represent the Tribe, and to act in all matters that concern the welfare of the Tribe; and

WHEREAS, the people of Saxman have reviewed the Draft Environmental Impact Statement for the Ketchikan Pulp Company Long-term Timber Sale Contract for the North Revillagigedo Project Area; and

WHEREAS, The Tlingit people of Saxman are the ancestral historical, and modern subsistence users of the Revillagigedo Island, and

WHEREAS, The Village of Saxman, whose population is 259 Native residents, is reliant on subsistence resources as a way of life, and

WHEREAS, the people of the Village of Saxman feel that the present timber harvest plans would dramatically impact subsistence resources and cause a great burden and danger to the community's way of life both personally and tribally, and

WHEREAS, The Saxman IRA Council, on behalf of the Organized Village of Saxman, finds the present subsistence information inaccurate, and

WHEREAS, The Saxman IRA Council is concerned that extra effort and planning must be made in order to reach subsistence users that need special attention due to cultural diversity and sensitivity, and

WHEREAS, The United States Forest Service is putting timber harvest over subsistence which is suppose to be given priority over other user groups pursuant to the position of ANILCA and the rights of Alaskan Natives to subsistence.

ORGANIZED VILLAGE OF SAXMAN
"SAXMAN IRA COUNCIL"
ROUTE 2, BOX 2 - SAXMAN
2706 SOUTH TONGASS
KETCHIKAN, ALASKA 99901
Phone: (907) 225-4166

NOW, THEREFORE BE IT RESOLVED, The Saxman IRA Council of The Organized Village of Saxman, the federally recognized tribe, strongly opposes and disagrees with the subsistence findings in the draft environmental impact statement for the Ketchikan Pulp Company's long term timber sale Contract for the North Revillagigedo Project area and until further and more accurate studies can be made of the impact of timber harvest on the area where our subsistence resources are.

#5
#35

CERTIFICATION

This resolution was duly adopted at a meeting of the Saxman IRA Council held on February 8, 1993 with a vote of 5 for and 0 against with 0 abstaining vote(s).

Nora DeWitt
Nora DeWitt, President

ATTESTED BY:
Sharon Seierup
Sharon Seierup, Recording Secretary

ALASKA BOARD OF FISHERIES AND ALASKA BOARD OF GAME

REGULATION PROPOSAL FORM

P.O. BOX 25526. JUNEAU, ALASKA 99802-5526

BOARD OF FISHERIES REGULATIONS

- ☐ Fishing Area _____
- ☒ Subsistence ☐ Personal Use
- ☐ Sport ☐ Commercial

JOINT BOARD REGULATIONS

☐ Advisory Committee ☐ Regional Council ☐ Rural

BOARD OF GAME REGULATIONS

Game Management Unit (GMU) _____

- ☐ Hunting ☐ Trapping
- ☒ Subsistence ☐ Other _____
- ☐ Resident
- ☐ Nonresident

Please answer all questions to the best of your ability. All the answers will be printed in the proposal packets along with the proposer's name (addresses and phone nos. will not be published). Use separate forms for each proposal.

1. Alaska Administrative Code Number 5 AAC _____ Reglation Book Page No. _____

2. What is the problem you would like the Board to address?

The content of the Draft Environmental Impact Statement for the Ketchikan Pulp Company's Long Term Timber Sale Contract for The North Revillagigedo Project Area.

3. What will happen if this problem is not solved?

The Village of Saxman's subsistence resources will be in danger and the right to subsistence resources by the native residents of Saxman will be in danger and the cultural and traditional rights of these residents will be abridged.

4. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

To reject the EIS and provide the community with a survey that is given with attention paid to the cultural diversity and sensitivity of our members.

5. Solutions to difficult problems benefit some people and hurt others:

A. Who is likely to benefit if your solution is adopted?

The native residents of the community that use subsistence resources

B. Who is likely to suffer if your solution is adopted?

Probably those who have funded the first EIS and need to Fund the activities of the survey suggested here.

6. List any other solutions you considered and why you rejected them.

Please see attached resolution #93-02-101

DO NOT WRITE HERE

Submitted By: Name Organized Village of Saxman, Saxman IRA Council
Individual or Group

Address Rt. 2 Box 2 - Saxman; Ketchikan, AK Zip Code 99901 Phone 225-4166

Nora DeWitt Nora DeWitt, President

11-061(1-92)MAC

WALTER J. HICKEL, GOVERNOR

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF GOVERNMENTAL COORDINATION

☐ SOUTHCENTRAL REGIONAL OFFICE
3601 "C" STREET, SUITE 370
ANCHORAGE, ALASKA 99503-2798
PH: (907) 561-6131/FAX: (907) 561-6134

☐ CENTRAL OFFICE
P.O. BOX 110030
JUNEAU, ALASKA 99811-0030
PH: (907) 465-3562/FAX: (907) 465-3075

☐ NORTHERN REGIONAL OFFICE
675 SEVENTH AVE., STATION H
FAIRBANKS, ALASKA 99701-4596
PH: (907) 451-2818/FAX: (907) 451-2814

March 2, 1993

Mr. Dave Rittenhouse
Forest Supervisor
U.S. Forest Service
Ketchikan Area
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Rittenhouse:

SUBJECT: North Revilla Draft EIS
STATE ID NO. AK921223-07

The Division of Governmental Coordination has concluded the State of Alaska's review of the draft environmental impact statement for the North Revilla long-term timber sale, according to the National Environmental Policy Act (NEPA). We appreciate the opportunity to participate at this stage of planning, and offer a consolidated response on behalf of the State resource agencies Alaska Departments of Natural Resources, Fish and Game, and Environmental Conservation). As this review was conducted to satisfy the requirements of NEPA, the State concerns include a broad range of issues.

Ultimately, per 15 CFR 930, Subpart C, this timber sale is required to be consistent to the maximum extent practicable with the standards of the Alaska Coastal Management Program (ACMP). The State is providing preliminary comments to the Forest Service to ensure that the final EIS is consistent with the ACMP. At the time the Forest Service submits a federal consistency determination to the State, the State will conduct an ACMP review.

Our comments are also intended to assist the U.S. Forest Service (USFS) in the preparation of a Final EIS that will be consistent with Section 319 of the Clean Water Act (Section 319) and Section 810 of ANILCA.

The State previously participated in a scoping review in August 1992 under State review No. AK910718-14J.

Original State agency comments received are included as Enclosure 1 for your reference.

I. PROJECT DESCRIPTION

The Forest Service proposes to harvest approximately 200 million board feet (mmbf) from an estimated 6,700 acres in the North Revilla Project Area of the Tongass National Forest, Ketchikan Area, Ketchikan Ranger District. Approximately 100 miles of new road will be constructed and 50 miles of existing roads reconstructed to facilitate timber removal. The project is intended in part to help satisfy the three-year current timber supply requirement of the Long-Term Contract with the Ketchikan Pulp Company (KPC). The project is also proposed to meet Tongass Timber Reform Act (TTRA) of 1990, directing the Forest Service to seek to provide a supply of timber which meets annual market demand to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources. The North Revilla project proposes to implement the TLMP (1979, as amended), as specified in the TLMP Management Direction/Emphasis for the management area within the Project Area.

II. COASTAL CONSISTENCY CONCERNS

A. Level of Information Required for Final Review: Unit Cards

The State is pleased to see improvements in the initial version of unit cards for potential cutting areas. **The State recommends the following changes and additions to ensure that the unit cards in the Final EIS provide sufficient information to make a final coastal consistency determination:** 32 H

1) Resource specialist recommendations,particularly the Fish/Watershed recommendations should be more site-specific.The inclusion of site-specific recommendations is the only way to avoid extensive additional unit card and/or field reviews prior to harvest. 26

2) Mitigation measures to fish and wildlife habitats as well as water quality should address both the direct effects and cumulative effects. Where specific Best Management Practices (BMP's) apply, the appropriate BMP numbers and statements should be specified on the unit card (see Section 319 comments). This will provide a specific basis for implementation monitoring. 26

3) The State recognizes that some units and roads may have to be deleted, altered or added after the ROD is issued to comply with standards and guidelines or to achieve overall management objectives. In the past, notification of these changes to the State has been intermittent. It is unclear to the State how and when the Forest Service intends to conduct updated NEPA revision of these changes. Pending the significance of such changes, additional ACMP review may be required. The State should be notified of any significant changes, especially increases or significant modifications to unit boundaries in areas of high value fish and wildlife habitat. 26

B. Water Quality Concerns

A number of unit cards include the following soils specialist recommendation: "This unit has a significant possibility to have areas reclassified as MMI = 4 [very high MMI]." Areas with high MMI ratings represent potential sediment sources due to erosion and mass wasting. The State assumes that such areas or units will be modified or deleted before the units reach the final layout stage, and that this information will be made available in the FEIS. If not, the State may require layout-stage unit card reviews and/or field reviews for very high MMI units. 02 26

The State commends the Forest Service for the excellent analysis and completeness of unit-specific soils concerns. The soils information included in the planning-level unit cards should be a model for other timber sale EIS's.

C. Fisheries Concerns

Soil stability, road-building activities, protection of riparian areas, maintenance of water quality, drainage-wide changes in hydrologic regimes, and protection of aquatic resources are examples of important coastal consistency concerns. As noted under Water Quality Concerns above, the EIS must identify mitigation measures for units and roads which may disturb unstable soils. 02

The FEIS should address the following fisheries issues:

1. Overall potential impacts and mitigation necessary to protect important fisheries habitat such as Traitors Creek; 42

2. Special provisions to maintain water quality at the Neets Bay hatchery facility; 42

3. Special provisions to maintain the integrity and consistency of the research data being collected by the Forest Sciences Lab at their Margaret Bay facility. 42

D. Log Transfer Facilities

Each log transfer facility (LTF) will require a separate coastal consistency review and determination at the time the necessary permitting applications are submitted to the appropriate agencies. In addition to the DNR and DFG preliminary concerns described below, DFG may eventually have coastal consistency concerns for other LTF's, particularly the facilities at Shrimp Bay and Klu Bay, after they are reviewed in the field.

1) The Forest Service should evaluate alternatives for all proposed LTF's in Traitors Cove. The DEIS states that "the effects of LTF's on fisheries resources have not been

quantified" (p.3-361). The cove is essential to a very large number of outmigrant salmonids that move into this area for a portion of their early-marine life cycle.The FEIS should evaluate potential effects of these facilities on the overall carrying capacity of Traitors Cove for juvenile salmonids. 4/A

2) **The FEIS should maintain unobstructed access to important subsistence and recreational resources.** The FEIS should identify mitigation necessary to maintain human access to shrimp, crab and sea cucumber resources as well as recreational resources. Will access (especially the placement of pots) be blocked or otherwise obstructed by the rafting, storage, or towing of logs? 05

3) The FEIS should more completely incorporate the site-specific information for two LTFs. The following information should be added to the Final EIS:

The NW Traitors Cove Site (#18) was the most productive of four sites evaluated in or near the project area in May 1992. Based on dive surveys, the National Marine Fisheries Service determined that the site does not meet the Timber Task Force LTF siting guidelines for water depth, site productivity or potential bark accumulation. NMFS also reports the presence of commercial quantities of sea cucumbers at the site. The Forest Service should evaluate the feasibility of moving the site or using existing facilities in Neets Bay. 35 42

Please note the DNR NEPA comments pertaining to LTF #18 at NW Traitors Cove (Virgin Bay) included in the NEPA comments section.

The North Traitors Cove Site (#22) is also a biologically productive site. During dive surveys, NMFS determined that the site does not meet the Timber Task Force LTF siting guidelines for productivity because it supports commercial quantities of sea cucumbers. Nevertheless, NMFS indicated that the site would be an appropriate location for an LTF because of the volume of timber expected to be transferred. DFG has expressed concerns about the proximity of the site to valuable upland habitat around the Salt Chuck. 35 42

4) Alternative Site to the Neets Bay LTF's

State concerns over the Traitor's Cove LTF's might be resolved by using the existing LTF located nearby in SW Neets Bay. The Forest Service should evaluate the feasibility and costs associated with different LTF options,including road construction, site construction and the overall operating costs as well as effects on other resources.

5) Bald eagle nest surveys conducted by the USFWS in 1992 within the project area should be used to identify any potential conflicts with roads and LTFs.

III. SECTION 319 CONSISTENCY COMMENTS

These comments are offered under the authority of Section 319(b)(2)(F) and 319(k) of the Clean Water Act, which gives States the authority to review Federal projects for consistency with State nonpoint source pollution management plans. The State of Alaska's plan is the Nonpoint Source Pollution Control Strategy (Strategy). DEC will work with the Forest Service under the terms of the Forest Service/ADEC Memorandum of Agreement, which describes in detail how the State and the Forest Service will implement the strategy.

A. Implementation monitoring

The implementation monitoring plan appears to be comprehensive, and covers most of the issues of concern to DEC. The following specific recommendations should be incorporated to improve the plan:

1. Page 2-43: To be effective, the monitoring objective for "Roads--Soil and Water Protection" should be defined better.

2. Page 2-44: Water Quality and Fish Habitat: Does the Forest Service intend to train layout and sale administration employees in BMP implementation monitoring? Currently, the Area hydrologists and soil scientists are doing this monitoring. Given that it has taken two years for them to become proficient, how does the Forest Service propose to train timber and engineering staff in monitoring? DEC is willing to work with the Forest Service to design and, if time allows, conduct such training.

B. Effectiveness monitoring

1) Page 2-49, Water Quality and Fish Habitat:

The introduction to this section states: "An effectiveness monitoring program is being developed on a forestwide basis in consultation with the State of Alaska." DEC is not aware of any such ongoing effort. The last meeting on the preparation of a forest-wide effectiveness monitoring program was held in July 1991. Under the time table set out in the Alaska Nonpoint Source Pollution Control Strategy, such a program or action plan was due to be developed by September 1991. Since the July 1991 meeting, the forest-wide effort appears to have stalled. DEC has received a proposed effectiveness monitoring action plan from the Chatham Area, but nothing from the Ketchikan Area. If the Ketchikan Area is working on such a plan, DEC would like to assist in its development.

2) The Ketchikan Area should use the effectiveness monitoring plan from the Southeast

Chichagof Timber Sale FEIS (including the monitoring errata sheet), and the associated draft effectiveness monitoring action plan for the Chatham Area as models for effectiveness monitoring of BMP's on water quality and fish habitat.

3) The Ketchikan Area is conducting two small-scale BMP effectiveness monitoring projects, but DEC has only received one brief interim report on one project. The Ketchikan Area should consider continuing or expanding these projects, and applying them to the North Revilla project. Please send all progress reports for these projects to DEC.

29 42

C. BMP Monitoring in the Project Area

Stream buffer windfirmness is the only type of water quality monitoring proposed in the project area. While this is an appropriate and important issue, the plan needs to address other important BMP monitoring issues as well.

DEC requests that the Forest Service include information in the FEIS that will answer the following questions:

35 29

1. What data and what current and proposed programs exist for establishing water quality baselines in the project area? Effectiveness monitoring cannot be well-implemented without this information.

2. Has the Ketchikan Area proposed a budget for BMP monitoring over the life of the project?

3. Coordination is needed to ensure that valid monitoring data is collected and to avoid duplication of effort on different projects. Do Quality Assurance/Quality Control plans exist for water quality monitoring? Does the Forest Service plan to coordinate or integrate BMP monitoring for this project with the project areas on Prince of Wales Island (Central Prince of Wales, Lab Bay, and Polk Inlet)?

4. The Forest Service should reference specific BMP numbers and language on the unit cards. Such references are important to document and implement the BMP's and other resource prescriptions. They simplify and improve the BMP implementation monitoring process. Soils, timber, and engineering comments included such references. Fish/Watershed comments did not, although fish/watershed specialist prescriptions imply references to (at a minimum) BMP's 12.6, 12.7, 13.9, and the several sections of BMP 13.16.

26 42

5. DEC assumes that the reference to "BMP 14" (in regard to minimizing the potential for landslides) in the engineering specialist prescriptions refers to the introduction to Section 14 (Transportation Facilities) in the BMP Handbook (FSH 2509.22). If more specificity in the prescription of BMP's is desired, one or more of BMP's 14.2, 14.3, 14.6, and 14.7 should be cited, depending on the site-specific situation. Each of these BMP's relates in some way

to minimizing landslide potential.

6. Were any watershed sensitivity models run for cumulative effects, sediment transport, or temperature. This would help to assess potential water quality impacts for the project and to determine sites for specific types of BMP effectiveness monitoring.

7. The Forest Service notes that Klu and Subsistence Creeks "may be described as potentially temperature sensitive." Has a determination been made on these creeks? If so, what, if any, mitigation is proposed?

8. DEC questions the usefulness of the "Windthrow risk" information included in the unit cards. All units are classified as being "H", which DEC assumes means "High." To be useful, information regarding the risk of windthrow must be more site specific, and must be tied to some form(s) of mitigation. determine no practical effect of Buffers was done

IV. NEPA COMMENTS

A. TLMP Land Use Allocations

The State concurs with the Forest Service that the proposed project is consistent with current TLMP (1979, as amended) management direction and land-use designations for the project area. * 32

The State supports measures to plan and implement an estimated 200 MMBF timber sale to meet the KPC Long Term Sale contract requirements. In so doing, we recognize the important commitment to the long-term contracts and the TLMP LUD III and LUD IV land use allocations in this planning area. * 32

The State recognizes that achievement of this management goal may require alternative management emphasis. Where proposed development activities conflict with protection of significant fish and wildlife habitat, opportunities may exist for harvest deferrals or substitution of harvest units in lower value habitat types. Where such decisions are made, the State requests that the FEIS fully analyze and explain the alternatives and decisions, including economic opportunity lost and/or gained. 35

B. Development of a Preferred Alternative

As the FS has not selected a preferred alternative for the North Revilla DEIS, the State looks forward to continued interagency discussion in the selection of the final preferred alternative, and would be available to assist the FS on specific issues raised in development of the FEIS.

The State recommends that the Forest Service modify the existing alternatives or create

new alternatives to develop a preferred alternative that meets State goals and concerns. The preferred alternative should:

1) Evaluate the long term timber harvest strategy as it fits into the Long-Term sale and overall harvest through the rotation period. This should relate the overall effects to Ketchikan and other nearby communities. 06

2) Evaluate and encourage opportunities for road-based recreation as well as other forms of recreation. 03

3) Select a road system that maximizes construction along the Ketchikan Gateway Borough's preferred access corridor for a Ketchikan-Canada road with its island terminus at Claude Point. 09

4) Select a road system that maximizes construction along the preferred access corridor for an affordable energy grid to the Tyee Lake Hydroelectric project. 09

5) Evaluate overall population viability, old growth retention and management, connectivity of habitats and habitat capability relative to Forest-wide goals and objectives. 04

6) Incorporate a more detailed analysis of cumulative effects and mitigate for any negative effects. The cumulative effects analysis should consider the effects on both natural resources and socioeconomic values. 35

7) DNR commented that Alternative 4 is the only alternative that does not propose a logging road and LTF on State Selected lands at Virgin Bay. Because Alternative 4 is less favorable from a timber harvest perspective, DNR recommends that the Forest Service revise Alternative 6 and consider accessing the units west of State Selected lands with a road from the SW Neets Bay LTF. If the Forest Service eliminates Virgin Bay LTF 18 and associated roads on State Selected lands, DNR prefers Alternative 6. DNR indicates that the **advantages of Alternative 6 over Alternative 4 are that it:**

Meets the 200 MMBF goal for the project area
Has the highest pond value of timber
Nets a positive return for the sale of timber
Provides the greatest return of revenue sharing to the State
Harvests less acreage
Requires less road construction
Requires fewer crossings of Class 1 & 2 streams
Retains more deer habitat capability
Retains more old growth stands

418

DNR identities the following disadvantages. Alternative 6:

Harvests more acres of high volume stands
Affects more acres with high mass movement potential
Reduces the level of employment and payroll to local communities

If Alternative 6 cannot be revised to delete the proposed LTF on state lands at Virgin Bay, DNR recommends that all activities on State Selected lands be deferred until the next entry. If this is not an option, DNR prefers Alternative 4.

C. Socio-Economic Analysis

DNR comments that the North Revilla DEIS contains a very complete and improved description of the socio-economic impacts when compared to previous EIS documents. The State commends the Forest Service for this level of work, including the projected timber receipts that will accrue to Ketchikan and the State.

DFG is concerned that except for sport hunting expenditures, the DEIS does not evaluate other economic value of wildlife. The economic analysis should evaluate the economic cost of decreasing wildlife populations within the project area for each alternative over the entire rotation. 04 06

The Ketchikan Gateway Borough has requested that the Forest Service identify the number of new logging and support jobs that will be created in Ketchikan and surrounding areas by the proposed project. 06

D. Virgin Bay LTF and Associated Activities:

The State is opposed to the development of the LTF (LTF #18) and logging roads within the state selected lands (NFCG #282) at Virgin Bay during this entry. The state selection was approved by the Regional Forester in 1989. These lands were selected specifically for public recreation and a potential marine park. DNR Division of Lands informed the Forest Service of the State's opposition to this LTF and associated roads in a letter dated October 22, 1992 (see attached copy). DNR suggested either accessing this area from another LTF or developing a mitigation plan that will enhance the public recreation potential of this area. The Forest Service has not responded to the DNR concerns. Before the next entry the Forest Service should explore other options to access this area or develop a mitigation plan in conjunction with DNR Division of Parks and Recreation. 41A

E. Timber Supply from Private Lands

On page 3-184 "Timber supply and demand" the Forest Service states that "93 percent of the timber harvested on private land was exported in the round." During the State/Forest Service meeting on the SDEIS of TLMP it was established that 25 percent of the private 42

harvest was utilized in the local market and 75 percent was exported as round logs. Kathleen Morse (Forest Service resource economist for the Alaska Region) participated in the sub-working group on timber supply and demand. Project plans should be consistent with the SDEIS for TLMP.

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F. General State Policy Relating to the Maintenance of Viable, Well-Distributed and Diverse Wildlife Populations

The Forest Service should incorporate current conservation biology concepts and strategies which will maintain diverse, viable and well-distributed wildlife populations and communities throughout the Tongass National Forest. While the Forest Service and the State agree that this goal is a Forest-wide goal rather than a project-level goal, the Forest Service must analyze the effects of each individual project in implementing this and other Forest-wide goals.

The State recognizes that population viability, distribution and biodiversity goals must extend beyond the boundaries of individual harvest units, project areas or WAA's. For this reason, individual projects must provide a cumulative effects analysis that relates the project actions to the larger Forest-wide goals. Cumulative effects analyses should take into account the impacts of timber sales on neighboring areas of Revilla Island. Those who use wildlife and other resources in the project area and other areas of Revilla need to know what the combined effects of these various projects on the island's wildlife and ecosystems are so they may know what their alternatives will be for using different areas. Such site-specific analysis was not done in TLMP and can only be done at the project level. Within this framework of cumulative effects and associated mitigation measures the State has the following concerns:

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1) Old Growth Definition

On page 3-161, Table 3-67 the note following the asterisk seems to state that second growth is a component of old-growth. In pointing out the difference between Sawtimber CFL and Old-Growth CFL it states that Saw timber CFL is different from old-growth because it does not include volume class 3 acres or acres of second growth. Old-growth CFL should not include second growth acres either. DEIS old-growth acreage figures should be changed if they include second-growth.

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The document repeatedly refers to Misty Fjords as having large or large contiguous blocks of old-growth (pg. 1-8, photo caption, pg. 3-93, pg. 3-95, table 3-47). While this timber may be old, it is not all high quality habitat. Elsewhere, the DEIS describes this habitat as "in a natural state." DFG believes that this is a more appropriate description of its character. The DEIS seems to imply that because large natural areas are nearby, the habitat requirements of wildlife species will be assured.

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2) Wildlife Habitat Retention

In the 1980s, the Forest Service and ADF&G mapped much of the old-growth wildlife retention in the Ketchikan area to comply with the current Forest Plan. At the time, it was intended that this would be a long-term, if not relatively permanent allocation. Formal agreements between DFG and the Forest Service state that changes to retention will only occur after a process of consultation with ADF&G. The DEIS does not address the harvest of such designated old-growth retention. 35

All of the alternatives and impact assessments should incorporate the current Forest Plan's retention concepts until the new TLMP is issued. The Forest Service has stated that the plan will incorporate both the current TLMP requirements and the most conservative potential requirements of the revised TLMP.

3) Mitigation Through Maintenance of Connectivity

The DEIS offers "connectivity" of old-growth patches as a factor that will mitigate for population distribution and viability. Connectivity of old-growth is only part of a solution. Unless the project area contains enough habitat to support **viable** populations, connectivity to old-growth in other areas will not help much.

DFG disagrees with inclusion of muskegs and second growth stands as part of the connectivity of habitats in the project area (pp. 3-97 and 3-98). Although these areas offer no physical impediments to wildlife movement, the commonly accepted idea of connectivity refers to corridors of suitable wildlife habitat. For wildlife to use an area, there must be a reason for animals to venture there. Muskegs lack cover and preferred foods and although animals travel through them they should not be considered corridors. The Forest Service should provide more detailed information and rationale on the utility of such areas as effective corridors for wildlife. 04 34

Similarly, second growth provides cover but not food for many species, such as deer, and so it is not likely to be used if alternatives exist. The Bluff Lake/Neets Creek example of a "second-growth corridor" in the DEIS is interesting (pg. 3-97). The second-growth valley bottom is ½ to 1 mile wide for most of its 4½ mile length. At this size it may constitute more of a barrier to deer, marten, and other old-growth dependent species than a corridor and should be evaluated in the FEIS. The long stretches of coastline that are now second growth are also termed travel corridors in the DEIS.

Pg. 3-104. The meaning of the last sentence is not clear. The sentence states: "The direct effects on biological diversity under all action alternatives are consistent with the amount of timber harvest allowed under implementation of TLMP (1979a, as amended)." Does this statement imply that indirect effects are not consistent with TLMP? Additional evaluation of these effects is needed. 42

G. Proportionality and harvest volume

In implementing the proportionality provision of the TTRA for the North Revilla timber sale, the State accepts the TIMTYP data, but with objection for the record. The accuracy of this approach is clearly a question of considerable concern to the State. The main objection is the TIMTYP data base contains significant variation in volume estimation and classification on a project-level basis since it is based on a forest-wide photo inventory. Again, in the December 6, 1991, State position on the TLMP Revision SDEIS the State said: "In order to develop a higher degree of reliability in the forest planning process, the State strongly recommends that the Forest Service continue to refine the technical databases and models upon which forest and project planning are based, including the timber type and vegetation maps.... Additional research and monitoring funds should be prioritized to improve the models having the most influence on forest and project planning decisions." DGC believes the matter concerning the type of database to determine proportionality should be pursued outside the parameters of a particular project. The offering area monitoring plan should include methods to critically test the reliability of the TIMTYP database to actual unit harvest volume. Such monitoring efforts could contribute to resolving specific concerns regarding the basis for achieving proportionality objectives.

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Also, Table 3-66 (Page 3-159) indicates that stands mapped as volume class 5 have more than 30 mbf/acre. Does this mean that these stands should be mapped as Volume Class 6 stands? The Forest Service should clearly explain how these stands will be treated for the purpose of determining proportionality.

H. Analysis of Effects on Wildlife.

DFG has concerns regarding declines of wildlife populations anticipated by this DEIS in and near the project area. For example in 2004, a few years after the completion of the proposed timber harvest, 51% of deer, 42% of marten, and 77% of brown creeper habitat capabilities will have been removed from the project area. The cumulative losses in wildlife habitat capabilities over the rotation are presented in the DEIS by the following examples: brown creeper (88%), hairy woodpecker (79%), deer (76%), and marten (62%) (p.3-89). Such declines in populations could severely restrict sport hunting and subsistence use of species such as deer for future generations, and raise serious concerns for the future **viability** of uncommon species such as marten, brown creepers, and several non-management indicators that are already sparsely distributed within the project area. It is likely that many types of impacts to wildlife species and ecosystem relationships are currently unknown, and will remain so without appropriately planned research.

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1) DFG is concerned that DFG deer population objectives were not presented in the DEIS. *The State is on record in stating that "...the deer population objectives and the*

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habitat capability model are only advisory tools for management decisions and not minimum mandatory standards." Contrary to statements in the DEIS on page 3-74, it is not difficult to compare the effects of the proposed project to the population objectives. Table 3-108 on page 3-216 of the DEIS where deer habitat capabilities for WAAs 509 and 510 are given by alternative, would be an excellent place to list ADF&G objectives for those WAAs. Even though the objectives are advisory, their inclusion would help to compare the effects of the different alternatives.

The DEIS should more clearly explain the potential effects of logging on deer populations. We suggest the following addition on page 3-73, first paragraph, immediately before the last sentence: "In most cases, timber harvest of deer winter range reduces the long-term quality of deer winter range. The combination of deep-snow winters and large amounts of deer winter range converted to second-growth compounds effects on deer populations. Snow significantly reduces forage availability in clearcuts during the winter. Closed-canopy second growth stands provide little forage in winter or summer. The amount of second growth and winter severity are key factors in determining the capability of the land to support deer populations."

2) Patch Size Effects

As in the Central Prince of Wales Island DEIS, DFG is pleased that the DEIS incorporates patch size factors into the deer, marten, and hairy woodpecker habitat capability models. DFG is also pleased with the Forest Services effort to show fragmentation in the project area. The IDT should be commended for the efforts made to produce the maps and table 3-49.This important improvement should be incorporated into all future NEPA analyses. The comparison of old-growth patches in figures 3-7 through 3-12 is an excellent graphic depiction of the extent of existing forest fragmentation, and the fragmentation that can be expected for each alternative. DFG would prefer larger maps for better readability and use of cross-hatching to differentiate the various types of blocks by size (those greater than 1,000 acres vs. those smaller than 1,000 acres).

3) Black Bear, Marten and Otter

The FEIS should show that enough habitat capability exists for well-distributed, viable populations of black bear, marten, and otter, then display how much additional habitat capability will be available to provide for human use of those species.

The "population needed to support harvest" for black bear, marten and otter in the table that begins on page 3-212, appears to be too low to support sustainable harvest. The Forest Service should reevaluate these population estimates to determine the minimum population required to allow annual harvests. DFG is willing to assist in developing these estimates.

DFG is pleased that the Forest Service has used 40% of habitat capability as the sustainable

harvest rate for marten. However, the appropriate sustainable harvest rate for otters is 20%, not 40%. A six-year study of otters in Cholmondeley Sound on Prince of Wales Island by Doug Larsen, now ADF&G Area Biologist in Ketchikan, found human-caused mortality among otters ranged from 9% to 32% annually with a probable sustainable rate of around 20%.

4) Effects of the Expanding Road Network on Wildlife

The FEIS should include a more complete analysis of the effects of the expanding road network on wildlife, especially species such as wolf, black bear, marten, and interior forest species. Wolves, for example, are thought to need areas with road and coastal access densities less than 0.58 km/km². While the State generally favors expansion of road development, this must be balanced with other resource protection and public needs. The FEIS should evaluate the impacts more completely, both present and cumulative, of increased road densities, and provide clear commitments for mitigation as appropriate.

5) Traitors Creek-Margaret Bay Road Connection

DFG has expressed concerns about the impact of the proposed Traitors Creek-Margaret Bay road connection. This area is particularly important for trumpeter swan overwintering, black bears and wolves. The FEIS should explicitly address the wildlife concerns for this road segment and fully analyze the alternatives. The road is proposed as an alternative to building a new camp facility in Fire Cove. As stated in the DEIS, the "road connection is not needed to haul timber harvest units in the action alternatives" (page 3-330). The Forest Service should analyze the overall cost of this road in relation to construction and access to a new camp facility, along with the effects of increased road density and access across important wildlife habitat. The road segment does not appear to be essential for any road connection from Canada to Ketchikan nor for powerline access from Ketchikan.

I. Forest Service Mitigation Measures for Wildlife

1) Seeding

Appendix I page 9 states that KV funds will be used to seed roads "to maintain or enhance wildlife habitat capability." The DEIS refers to a "Long-term Sale FEIS" which prescribed seeding as a mitigation measure. Which FEIS does this refer to? **As in the case of pre-commercial thinning, no evidence is presented that seeding will significantly benefit wildlife.** Particularly since only 50 acres is proposed for seeding DFG questions the value of spending wildlife KV funds on this project which seems to provide greater benefits for soil and roadbed stability and thus should be funded from those budgets. DFG would like to see evidence that the grasses mentioned will benefit the designated wildlife species and a specific estimate of what the benefit of seeding 50 acres will be.

2) Thinning

Why is pre-commercial thinning once again proposed to mitigate losses to wildlife habitat (pp. 2-33, 2-34, 3-145, and Appendix I, pg. 11). **Although thinning is a good silvicultural practice that allows the Forest Service to set timber harvest levels at a higher Annual Sale Quantity (ASQ), the contention that thinning is an effective wildlife mitigation measure cannot be supported at this time.** The Forest Service should implement an adequate experiment and monitoring program to demonstrate the specific wildlife benefits derived from thinning to support this mitigation measure. The State is willing to assist the Forest Service in developing such a program. ADF&G would like to work with the Forest Service to explore more productive ways in which KV money can be spent on wildlife.

3) Wildlife Baseline Data, Monitoring, Mitigation, and Standards/Guidelines

DFG comments that the wildlife survey, monitoring, and mitigation measures proposed by this DEIS are weak and will not significantly protect important wildlife habitats. The ROD should commit to an effective monitoring plan for wildlife populations in the project area to determine and mitigate the effects of the action alternative. The monitoring plan should identify appropriate thresholds of impact and apply effective mitigation measures to avoid exceeding these thresholds. Ideally, the Forest Service should initiate comprehensive wildlife surveys in the project area prior to initiating proposed activities, and monitor wildlife populations during and following project implementation. The DEIS lacks important baseline data for making accurate biological impact assessments and does not commit to a wildlife population monitoring program to test or validate the assumptions projected by proposed activities. Considering the level of impacts proposed, the temperate rainforest of coastal southeast Alaska is probably one of the least-studied ecosystems in North America. Much of the biological research which has been accomplished in southeast Alaska was done in northern southeast, while the vast majority of logging occurs in southern southeast. In addition to management indicator species, surveys and population monitoring should be considered for marbled murrelets, goshawks, wolves, and Vancouver Canada geese.

Wildlife surveys should be conducted in the project area to locate nests and other important habitats. Nesting surveys should be conducted during the prime nesting period for each individual species. Roads, camps, and harvest units, should be examined and designed to prevent impacts to or disturbance of important habitats of rare or uncommon species.

The FEIS should discuss protection of goshawks which may use the project area. The goshawk population in southeast Alaska has recently been the subject of a status review by the U.S. Fish & Wildlife Service (USFWS). Goshawks have been observed (infrequently) in the project area. How much of the area has been surveyed for goshawks? Which surveys were conducted according to Forest Service protocol? What is the estimated effectiveness of locating goshawks in the units the ROD proposes to harvest? Special provisions, similar to those suggested by the USFWS for the SE Chichagof Timber Sale, should be considered by

the Forest Service to address goshawks. Survey and inventory work, along with monitoring and the collection of data, need to be accomplished.

DFG asks how the Forest Service plans to practically implement the appropriate standards and guidelines to ensure protection of marbled murrelets? DFG believes that statements regarding marbled murrelets are misleading in that a reader could think that something significant is being done to protect murrelets. Even though "Interim Standards and Guidelines for marbled murrelets call for leaving a 30 acre wind-firm buffer around all nests discovered" (p. 3-108), the DEIS gives no indication of the probability of finding a nest before it is cut, or whether or not this is an effective mitigation measure. As only one marbled murrelet nest has been discovered in southern southeast Alaska in 40 years of industrial scale logging, the likelihood of actually pin-pointing specific nest trees prior to cutting appears small. Snag management standards and guidelines have similar short-comings that need to be addressed by the Forest Service.

DFG believes that the effectiveness monitoring described on page 2-50 is inadequate. Harvest of winter habitat may exacerbate the detrimental effects of severe weather on deer. It may appear that weather is "equally" responsible with logging for deer population declines because these factors can combine to cause declines. So many factors influence the number of deer harvested from an area in a year that reviewing harvest ticket data is inadequate monitoring. monitoring should determine whether deer population declines are greater in logged areas than in unlogged ones after winters of severe weather. This will require a greater investment in time and resources than examining harvest ticket data, but it will give more useful information.

4. Critical Fish and Wildlife Habitat in the Traitors Cove Drainage and Salt Chuck

DFG has identified the Traitors Cove drainage as the most productive fish and wildlife habitat in the project area. This habitat supports a complex, diverse and highly active food chain. This results from the combination of the large anadromous Traitors Creek drainage (containing one of the largest salmon runs on Revilla Island), which flows into highly productive estuarine habitat (Traitors Cove Salt Chuck) and bounded by Traitors Cove. The surrounding uplands are some of the least fragmented high-quality old-growth habitat in the project area. The Traitors Cove drainage is strategically located adjacent to the Naha, a large primitive area reserved for fish/wildlife protection and recreation.

Upland species of particular concern include wolves (requiring large areas), large natural runs of salmon (requiring aquatic habitats like Traitors Creek, Salt Chuck and Cove), trumpeter swans (a designated sensitive species requiring habitats like the Traitors Salt Chuck), marten (dependent upon mature forests and sensitive to fragmentation and roaded access), black bear (with robust but vulnerable productivity which favor major salt chucks and drainages with abundant runs of salmon), loons, land otters, seals, and shrimp (all dependent upon the rich food chain available in aquatic habitats such as Traitors Cove and

Salt Chuck).

Aquatic species of concern include the large natural salmon runs in Traitors Cove, and the important commercial and personal-use shrimp and dungeness crab fisheries. Specific descriptions of these resources can be found in the attached DFG comments.

5. DFG recommends that the Forest Service minimize harvest within most of VCU 739 (Traitors Creek and Traitor's Cove Salt Chuck) and the northern portion of VCU #738. DFG recommendations for specific units to delete in this entry are shown in Attachment A. DFG suggests that this will provide more effective habitat protection for species of wildlife which rely on large areas of high-quality old-growth. The Forest Service should evaluate the feasibility of relocating activities proposed in Traitors Cove, including most harvest units, certain portions of roads and the two new log dumps. It appears that this could be accomplished without decreasing the total proposed volume of timber to harvested from the project area.

Reduced cutting in this area is consistent with both the current Forest Plan and the proposed revised Forest Plan. The Traitors Cove Salt Chuck drainage is a LUD III area, which means that: "...Potential timber yields will be reduced to the extent needed to protect important biological and aesthetic values" (p. 1-14). With the extensive amount of past timber harvesting which has already occurred here, it would be difficult to justify anything other than minimal logging in this area during this new entry. This same area, in the revised TLMP, is identified as "Modified Landscape." This directs that there be no more than a slow reduction in the amount of old-growth (p. 1-21). Consequently, the harvest proposed for Traitors Cove in this EIS, if selected in the ROD, would seem inconsistent with both Forest Plans.

Generally, DFG seeks to minimize wildlife impacts by postponing harvest in the more important unfragmented high-value fish and wildlife habitats, such as in Traitors Cove, and by dropping other specific units which have various types of resource conflicts.

The Forest Service will exclude approximately one-half of the potential units from the final logging plan in this operating period when a single action alternative is chosen. To assist the Forest Service in choosing units which will still provide 200 million board feet for timber harvest, but temporarily avoid entry into some of the highest value wildlife habitats, DFG has attached a recommended list of specific units to exclude from the ROD (Attachment A). This pool of units amounts to about 77 mmbf over an area of approximately 2,400 acres. DFG is also concerned about some units in Shrimp Bay, and perhaps other places. As the FEIS proceeds toward selecting a final alternative DFG would like to meet with the Forest Service regarding the potential to exclude additional units.

ANILCA 810 ANALYSIS

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The ANILCA 810 analysis, conclusion that: "The actions proposed in Alternatives 2-6 will not represent a significant possibility of a significant restriction on subsistence use of deer and certain furbearers in the Project Area" conflicts with other subsistence statements in the DEIS. The justifications for proceeding with this project after findings of significant restriction have been made are not convincing. As habitat capabilities decline, so will the ability of local subsistence and non-local sport hunters to harvest deer and other species in the project area. Sport hunting opportunities, primarily by Ketchikan hunters, will be lost first. The DEIS recognizes that "there may be a significant possibility of a significant restriction of subsistence use of deer and some furbearers within the Project Area for all alternatives in the future" (p.2-26). On page 3-225 (and 224) the DEIS reiterates that there is "a significant possibility of a significant restriction of subsistence uses of deer and marten."

The Division of Subsistence recommends the North Revilla FEIS be patterned after the subsistence analysis of the Southeast Chichagof Timber Sale. The North Revilla DEIS is not nearly as thorough as the SE Chichagof document in a number of critical ways. **The Division of Subsistence has the following specific concerns and suggestions for improvements:**

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1. The FEIS should systematically examine impacts on deer hunting patterns on a WAA and on a community basis. The EIS should describe and analyze the total subsistence hunting patterns of the affected communities. It is not acceptable to limit discussion only to the project area, because other timber sales which are underway, such as the upper Carroll and Three Creeks Sales, may affect these same communities.

2. The FEIS should present and discuss habitat capability and changes to habitat capability for deer for sufficient time periods. Years 1954, 1990, 2010 (or end of sale), and 2040 need to be used.

3. The DEIS incorrectly assumes that subsistence demand will not increase over time. Historical or demographic evidence does not support this assumption. The DEIS should follow the SE Chichagof FEIS which includes a model for projecting deer demand (present and future harvest) versus supply (10% of habitat capability) over the next fifty years.

4. The FEIS should clearly distinguish and analyze effects of logging under the North Revilla project from overall cumulative forest-wide effects of logging. The SE Chichagof plan should serve as a guide to the planning team in analyzing project-specific versus cumulative forest-wide effects on each community's subsistence.

5. The FEIS should present maps showing the cumulative effect of logging in the Tongass National Forest. See the SE Chichagof FEIS (Appendix) which incorporates GIS mapped analysis of deer supply (10% habitat capability) vs. demand (present and future harvest) over the next fifty years. This kind of spatial analysis is critical in helping the public understand both the project-specific and region-wide impacts on subsistence. A similar analysis may be

appropriate for marten and black bear.

6. The justifications for proceeding with this project after findings of significant restriction have been made are not convincing. See comments on the same issue for the SE Chichagof Plan. The reasoning put forth in the second to last paragraph on page 3-224 strikes us as especially specious and a poor rationalization.

The discussion of mitigation of subsistence impacts is minimal and sometimes unclear. For example, the DEIS appears to propose restrictions on sport hunting of deer (at 3-223). DFG are not clear that this is a recommendation made by the DEIS or a possible mitigation measure.

As time permits, the Division of Subsistence is willing to work with the planning team to improve the subsistence analysis before issuance of the FEIS.

We appreciate the opportunity to comment on this project.

Sincerely,

Bill Hanson
Project Analyst

Enclosures (5)

cc: Jack Gustafson, DFG, Ketchikan
Rick Reed, DFG, Juneau
Jim Ferguson, DEC, Juneau
Daryl McRoberts, DNR, Juneau
Lorraine Marshall, DGC, Juneau
Michael Rody, Ketchikan Gateway Borough, Ketchikan

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Ketchikan Area State Parks Advisory Board
9883 N. Tongass - Ketchikan, AK 99901

February 12, 1993

Dave Arrasmith, IDT Planning Staff Officer
Ketchikan Area
Tongass National Forest
Federal Building
Ketchikan, Alaska 99901

Dear Mr. Arrasmith,

The Ketchikan Area State Parks Advisory Board would like to enter into the record the following comments on the North Revilla Draft Environmental Impact Statement:

The Virgin Bay area of Traitors Cove has been identified by the Ketchikan Area State Parks Advisory Board as a possible site for a future state marine park, and the area has been nominated by the Board and the State of Alaska DNR - Division of Parks and Outdoor Recreation as a land selection under section 6(a) of the Alaska Statehood Act.

We note the North Revilla Draft EIS proposes establishing a new log transfer facility (LTF #18) within the boundaries of this State selection. The Ketchikan Area State Parks Advisory Board considers the establishment of an LTF within the boundaries of the Virgin Bay selection to be incompatible with our stated intent of establishing a state marine park. A previous marine park request at Margaret Bay was turned down because of the existence of an LTF site, and we do not wish to see the Virgin Bay selection also removed as an option. (See attachment: Virgin Bay, selection history). We therefore urge the Forest Service to drop the proposed LTF #18 from the Draft EIS and develop an alternate LTF site outside of the selection's boundaries.

Thank you for your consideration.

Sincerely,

Craig M. Moore

Craig M. Moore
Chair,
Ketchikan Area State Parks Advisory Board

Attachment: NFCG Selection, Virgin Bay (2 pages)

6. Virgin Bay (Revillagigedo Island)

LOCATION: On Traitors Cove, west side of Revillagigedo Island north of Ketchikan.

LEGAL DESCRIPTION: T. 71 S., R. 90 E., C.R.M.

NOMINATED BY: Ketchikan State Park Advisory Board, DNR-Division of Parks and Outdoor Recreation

ACCESS: By boat to Traitors Cove - no reported anchorage in Virgin Bay.

NEARBY COMMUNITIES: Ketchikan - 25 miles South to Ward Cove, 33 miles to Ketchikan Harbor.

LAND STATUS: National Forest

GENERAL DESCRIPTION: Nomination of 490 acres surrounds a small cove (Virgin Bay) on the west side of Traitors Cove. The small cove looks very sheltered, but we have no confirmation on its suitability for anchorage. The land around the cove rises to 200 feet. To the north, the land rises steeply to over 1,800 feet.

PURPOSE AND SUITABILITY: Nominated for community recreation including commercial recreation. The land is suitable for these uses. The land is suitable for a future state park.

SELECTION HISTORY: Prior selection (Traitors Cove) is across cove (1 1/2 miles). The Traitors Cove selection is not suitable for a marine park because it is the site of a timber transfer facility. Virgin Bay was not previously considered for selection.

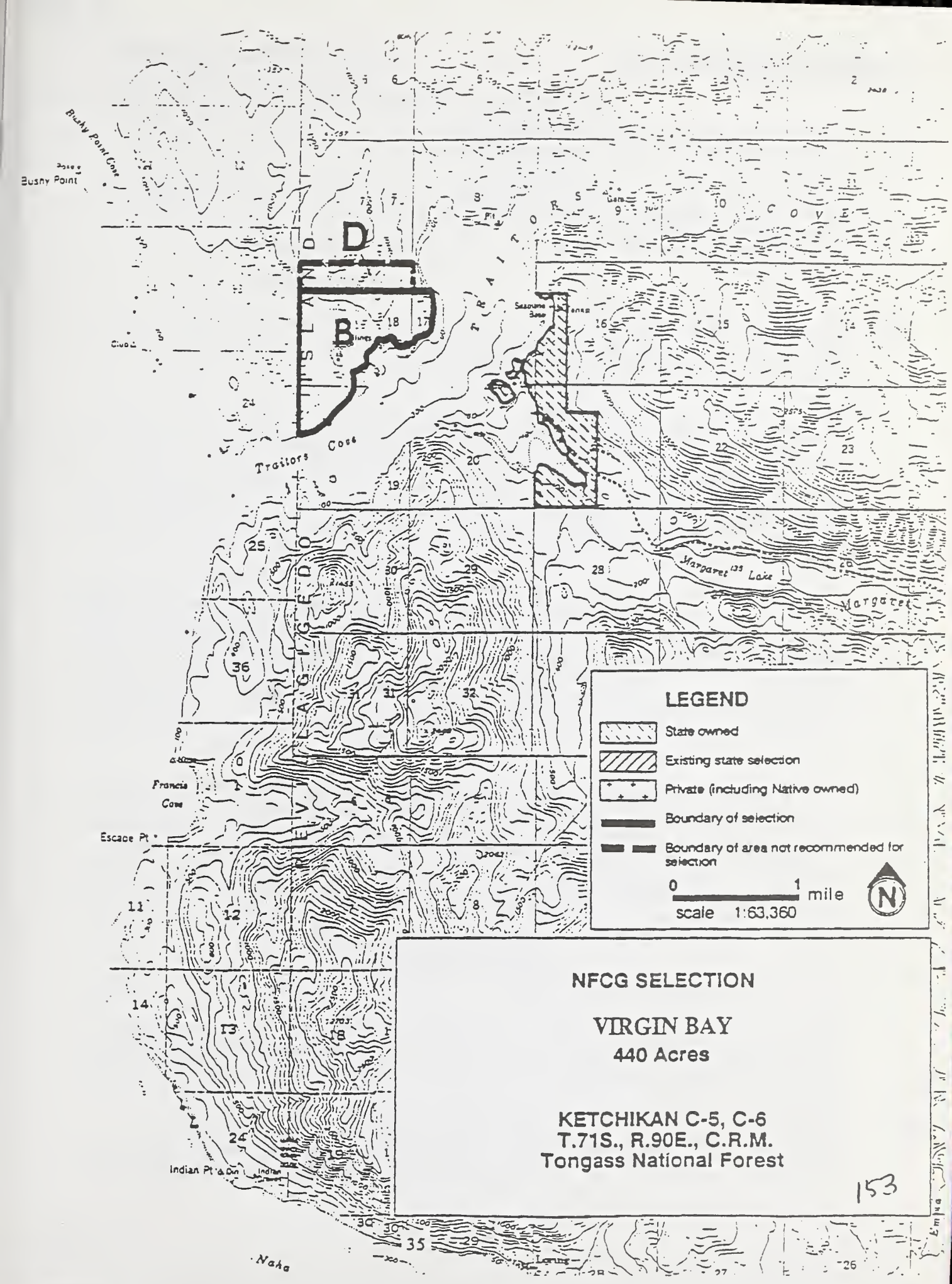
SHOULD READ MARGARET BAY

DIFFERENCE BETWEEN STATE AND FEDERAL MANAGEMENT: Pace of recreation development may differ, commercial recreation development more likely under state management. If designated a state park, recreation and habitat values would receive greater protection.

DRAFT RECOMMENDATION: Priority B due to suitability for recreation. Forest Service could manage for recreation, but would need to weigh against other competing uses. Steep land at the north end was dropped from the selection.

PUBLIC COMMENTS: The four comments received were in support of the selection. One comment said the harbor offers reasonable protection. There is an old clearcut on the north shore and mudflats at the head of the bay.

DECISION: Select as Priority B for community recreation (440 acres), and possible designation by the legislature as a State Park.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B
Busby Point
Busby Point Cove
Trailors Cove
Francis Cove
Escape Pt.
Indian Pt.
Indian Cove
Nahe
Margaret Lake
Margaret
LEGEND
State owned
Existing state selection
Private (including Native owned)
Boundary of selection
Boundary of area not recommended for selection
0
1 mile
scale 1:63,360
N
NFCG SELECTION
VIRGIN BAY
440 Acres
KETCHIKAN C-5, C-6
T.71S., R.90E., C.R.M.
Tongass National Forest
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MEMORANDUM

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

NA

To: Lorraine Marshall
Project Coordinator
Division of Governmental Coordination

DATE: February 1, 1993

FILE NO: AK921223-07J

PHONE: 465-4287

FROM: Richard Reed
Regional Supervisor
Habitat & Restoration Division

SUBJECT: North Revilla DEIS

The Department of Fish and Game appreciates the opportunity to review the Forest Service's (FS) North Revillagigedo Island Draft Environmental Impact Statement (DEIS). The information and recommendations contained herein are intended for use in the interagency development of a consolidated state response, and we look forward to working with your office and other departments in developing that response.

There are 109,520 acres in the project area, of which 3,240 acres (3%) are legislatively withdrawn. About 16,850 acres have been previously harvested from within the North Revilla Project Area. Approximately 21,640 unharvested acres remain as operable commercial forest lands (CFL), and form the potential long-term unit pool (p. 3-156). About 15,000 acres of this is commercially important old-growth (Volume Classes 5, 6, and 7). Thirty-one percent of the total operable CFL is expected to be harvested as a result of this EIS.

In the North Revilla DEIS the FS proposes to harvest approximately 200 million board feet (mmbf) from an estimated 6,700 acres. Approximately 100 miles of new road will be constructed and 50 miles of existing roads reconstructed to facilitate timber removal. We have generally attempted to separate the coastal consistency, NEPA, and ANILCA issues into categories, which are described below:

COASTAL CONSISTENCY

(1) Log Transfer Facilities

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Each log transfer facility (LTF) will require its own coastal consistency review and determination at the time the necessary permitting applications are submitted to the appropriate agencies. As the customary detailed ACMP review will eventually be needed for operations, we would like to identify some important concerns we have, especially with the new sites in Traitors Cove (#18 and #22). In order to alert the FS of these concerns early-on, we have included a detailed discussion of

these two sites under the NEPA comments. The potential conflicts at these sites may be best resolved by utilizing the existing LTF located only a few miles away in SW Neets Bay. As explained later, there could also be economic advantages for doing this. Other LTFs may have coastal consistency concerns, particularly the facilities at Shrimp Bay and Klu Bay, but these have not been reviewed in detail at this time.

(2) Fisheries Concerns

As 17% (2,532 acres) of all existing riparian areas within the Project Area have already been harvested, it is important that the remaining fisheries habitat values be maintained. Logging on steep slopes, soil stability, road-building activities, impacts to riparian areas, changes in water quality, drainage-wide changes in hydrologic regimes, and impacts to the ecology and/or productivity of aquatic resources are examples of important coastal consistency concerns. This EIS seems to propose a considerable amount of logging on soils with high, or very high, mass movement indices. As "naturally unstable soils are common throughout the Project Area" (p.3-28), sufficient on-site planning, mitigation, and monitoring must be provided to address the potential conflicts. There are also concerns with the overall impacts to important fisheries habitat and on-going projects within the area. Traitors Creek, for example, is an extremely important anadromous system. Also, will any special provisions be applied to maintain water quality at the Neets Bay hatchery facility, or to assure the consistency of the research data being collected by the Forest Sciences Lab at their Margaret Bay facility? The FEIS should address these issues.

#2 #29 #19

(3) Unit Cards

We are pleased to see the initial version of unit cards for potential cutting areas. Although the cards are still preliminary in nature, they are helpful in identifying units for which more detailed reviews may be necessary. As specialists reports become available and more site-specific information is developed, some specific unit cards will eventually need to be examined in greater detail. Additionally, as more field work is accomplished and changes are made in roading and logging plans from what is shown on the Phase I cards, we would like to be able to track those changes and evaluate their effects upon fish & wildlife habitats and cumulative impacts. Consequently, we would like to be kept apprised of changes to North Revilla unit cards if and when they occur. This is also a NEPA issue, which is discussed under a section referring to changes in unit boundaries.

26

NEPA COMMENTS

(1) Analysis of effects on wildlife.

Our department has concerns regarding the dramatic declines of wildlife populations anticipated by this DEIS in and near the project area. For example in 2004, a few years after the completion of the proposed timber harvest, 51% of deer, 42% of marten, and 77% of brown creeper habitat capabilities will have been removed from the project area. The cumulative losses in wildlife habitat capabilities over the rotation are presented in the DEIS by the following examples: brown creeper (88%), hairy woodpecker (79%), deer (76%), and marten (62%) (p.3-89). Such dramatic declines in populations could severely restrict sport hunting and subsistence use of species such as deer for future generations, and raise serious concerns for the future viability of uncommon species such as marten, brown creepers, and several non-management indicators that are already sparsely distributed within the project area. Also, it is likely that many types of impacts to wildlife species and ecosystem relationships are currently unknown, and will remain so without appropriately planned research.

Deer

#4 #42

We are disappointed that ADF&G deer population objectives were not presented in the DEIS. Contrary to what the DEIS says on page 3-74, it is not difficult to compare the effects of the proposed project to the population objectives. Table 3-108 on page 3-216 of the DEIS where deer habitat capabilities for WAAs 509 and 510 are given by alternative would be an excellent place to list ADF&G objectives for those WAAs. Reviewers would then be able to compare effects of the alternatives to those population objectives.

#4 #42

The DEIS lacks a clear statement of the effect of logging on deer populations. The following addition is suggested to remedy this deficiency. On page 3-73, first paragraph, immediately before the last sentence, the following should be inserted: "In most cases, timber harvest reduces the long-term quality of deer winter range. The combination of deep-snow winters and large amounts of deer winter range converted to second-growth compounds effects on deer populations. Snow significantly reduces forage availability in clearcuts during the winter. Closed-canopy second growth stands provide little forage in winter or summer. The amount of second growth and winter severity are key factors in determining the capability of the land to support deer populations."

Patch Size Effects

We are pleased to see patch size factors incorporated into the deer, marten, and hairy woodpecker habitat capability models. To our knowledge this is the first time these factors have been used in environmental analysis on these species. We think it is an important improvement and hope to see it in all future NEPA analyses. Likewise the comparison of old-growth patches in figures 3-7 through 3-12 is an excellent graphic depiction of the extent of existing forest fragmentation, and the fragmentation that can be expected for each alternative. We prefer the maps to

be larger for better readability and would like to see cross-hatching used to differentiate the various types of blocks by size (those greater than 1,000 acres vs. those smaller than that), but we are pleased to see effort being made to show fragmentation in the project area. The IDT should be commended for the efforts made to produce the maps and table 3-49.

Black bear, marten, and otter

The table showing harvest of these species beginning on page 3-212 contains a column labeled "Population needed to support harvest." For the most part, the figures in this column are too low. Mathematically they may appear correct but they ignore the principles of population biology. If populations were to drop to the numbers listed here, it is almost certain that the populations could not sustain an annual harvest. In fact, wildlife managers would instead be concerned that the population could be vulnerable to extirpation. The animals available for human use are those beyond what are needed for viable populations. The EIS needs to first show that enough habitat capability for well-distributed, viable populations of black bear, marten, and otter exists by using the recommendations of the Interagency Viability Committee Report, then display how much additional habitat capability will be available to provide for human use of those species.

We are pleased to see the Forest Service has used 40% of habitat capability as the sustainable harvest rate for marten. However, we believe that an appropriate sustainable harvest rate for otters is 20% not 40%. A six-year study of otters in Cholmondeley Sound on Prince of Wales Island by Doug Larsen, now ADF&G Area Biologist in Ketchikan, found human-caused mortality among otters ranged from 9% to 32% annually with a probable sustainable rate of around 20%.

Effects of intensive road network on wildlife

The DEIS provides an insufficient analysis of how the reduction of roadless areas affects wildlife, especially species such as wolf, black bear, marten, and interior forest species. Wolves, for example, are thought to have viability problems in areas with road and coastal access in excess of 0.58 km/km². The FEIS should better evaluate the impacts, both present and cumulative, of excessive road densities, and provide clear commitments for mitigation as appropriate.

Seeding

Appendix I page 9 states that KV funds will be used to see roads "to maintain or enhance wildlife habitat capability." The DEIS refers to a "Long-term Sale FEIS" which prescribed seeding as a mitigation measure. Which FEIS is that? As in the case of pre-commercial thinning, no evidence is presented that seeding will significantly benefit wildlife. Particularly since only 50 acres is proposed for seeding we question the value of spending wildlife KV funds on this project which seems to provide greater benefits for soil and roadbed stability and thus should be funded

from those budgets. We would like to see evidence that the grasses mentioned will in fact benefit the wildlife species named and an estimate of what the benefit of seeding 50 acres will be to wildlife.

Table 3-67

#42 On page 3-161, Table 3-67 the note following the asterisk seems to state that second growth is a component of old-growth. In pointing out the difference between Saw timber CFL and Old-Growth CFL it states that Saw timber CFL is different from old-growth because it does not include volume class 3 acres or acres of second growth. Old-growth CFL should not include second growth acres either. DEIS old-growth acreage figures should be changed if they include second-growth.

Cumulative effects

Cumulative effects analysis should take into account the impacts of timber sales on neighboring areas of Revilla Island. Limiting cumulative effects analysis to the extent of the boundaries of WAAs is not adequate. Those who use wildlife in the project area and other areas of Revilla need to know what the combined effects of these various projects on the island's wildlife and ecosystems are so they may know what their alternatives will be for using different areas. Such site-specific analysis was not done in TLMP and can only be done at the project level.

#4 #5 #28 #33

(2) The DEIS does not discuss or address the issue of wildlife retention as required in the current Tongass Plan.

In the 1980s, the FS and ADF&G mapped much of the old-growth wildlife retention in the Ketchikan area to comply with the current Forest Plan. At the time, it was intended that this would be a long-term, if not relatively permanent allocation. There are also formal agreements between our agencies, currently still in effect, that changes to retention would only occur after a process of consultation with ADF&G. The DEIS fails to address the loss of designated old-growth retention.

#4 #35

Additionally, all of the alternatives and impact assessments were developed without first incorporating the current Forest Plan's retention concepts. All of the action alternatives in this DEIS, consequently come from a timber target specifying the accelerated harvest of the remaining old-growth, and no action alternatives consider the precepts of wildlife planning which are still in effect. If a revised Forest Plan has not been signed by the time of a Final EIS for North Revilla, it appears such wildlife planning could render all action alternatives invalid at the time of the Record of Decision.

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(3) The FEIS must recognize that thinning is not effective mitigation for lost wildlife habitat.

The DEIS states that "all mitigation measures are assumed to be completely effective when designed, applied and implemented

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properly " (p.32 and 2-40), then makes impact assessments based upon this assumption. Why is pre-commercial thinning once again proposed to mitigate losses to wildlife habitat (pp. 2-33, 2-34, 3-145, and Appendix I, pg. 11) when biologists throughout southeast Alaska appear to be unanimous in their belief that it is not effective? Although thinning is a good silvicultural practice, and allows the FS to set timber harvest levels at a higher Annual Sale Quantity (ASQ), the contention that thinning is an effective wildlife mitigation measure simply cannot be supported.

ADF&G would like to jointly work with the FS to explore more productive ways in which KV money can be spent on wildlife, even if this involves pursuing an exemption to concepts which may apply to fire-ecosystems of other parts of the U.S., but not to the unique temperate rainforest ecology of southeast Alaska.

(4) The need for a scientifically credible plan for maintaining viable and well distributed populations of wildlife.

In the absence of a plan for maintaining retention, some alternative strategy needs to be developed for the protection of wildlife resources. The activities proposed by this DEIS are not tiered to a scientifically credible plan for maintaining viable and well distributed populations of wildlife. We believe the FS needs to incorporate current conservation biology concepts and strategies which will maintain biological diversity in the North Revilla area. Recommendations to attempt to keep wildlife populations viable and well distributed are contained in the 1992 Interagency Viable Population Committee Report, which was accomplished at the request of the TLMP planning team. In our scoping comments we suggested that the concepts and recommendations of this interagency committee report be presented, discussed and incorporated into one or more alternatives of this DEIS. The work of the Interagency Viable Population Committee was not mentioned or analyzed in the DEIS, nor were specific reserves or Habitat Conservation Areas referred to as being a part of a more wide-ranging overall plan for the protection wildlife. As discussed in our scoping comments, these concerns need to be more prominently incorporated into the FEIS and ROD for this project area.

The document repeatedly refers to Misty Fjords as having large or large contiguous blocks of old-growth (pg. 1-8, photo caption, pg. 3-93, pg. 3-95, table 3-47). This is an erroneous characterization of the Misty Fjords area and the quality of its habitat. Another, more accurate representation of the habitat in the DEIS is that it is in a "natural state." But the DEIS seems to imply that because large natural areas are nearby, the habitat requirements of wildlife species will be assured.

The DEIS refers to "connectivity" of old-growth patches as if that will take care of the issue of viability. Connectivity of old-growth is not a strategy in itself, it is only part of a

solution. Unless the project area contains enough habitat to support viable populations, its connectivity to old-growth in other areas will not help much. Corridors need to connect something to something else. The report of the Interagency Viable Population Committee indicates the need for at least one small habitat conservation area of about 10,000 acres in the project area. At a minimum, such a small habitat conservation area should be established in the Traitors Cove/Salt Chuck drainage.

To include muskegs and second growth stands as part of the connectivity of habitats in the project area (as the DEIS does on pp. 3-97 and 3-98) is inappropriate. Although these areas offer no physical impediments to wildlife movement, the commonly accepted idea of connectivity refers to corridors of suitable wildlife habitat. For wildlife to use an area, there must be a reason for animals to venture there. Muskegs lack cover and preferred foods and although animals travel through them they should not be considered corridors. Second growth provides cover but not food for many species, such as deer, and so it is not likely to be used if alternatives exist. The Bluff Lake/Neets Creek example of a "second-growth corridor" in the DEIS is interesting (pg. 3-97). The second-growth valley bottom is ½ to 1 mile wide for most if its 4½ mile length. At this size it constitutes more of a barrier to deer, marten, and other old-growth dependent species than a corridor. The long stretches of coastline that are now second growth are also termed travel corridors in the DEIS, which we believe is inaccurate. This seems to us to be a misinterpretation of the terms and the concepts of travel corridors and connectivity of habitats. It should be changed for the FEIS.

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Pg. 3-104. The meaning of the last sentence is not clear. Effects on biodiversity cannot be "consistent with the amount of timber harvest."

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(5) Insufficient wildlife baseline data, monitoring, mitigation, and standards/guidelines.

The DEIS lacks important baseline data for making accurate biological impact assessments and does not commit to a wildlife population monitoring program to test or validate the assumptions projected by project activities. Considering the level of impacts proposed, the temperate rainforest of coastal southeast Alaska is probably one of the least-studied ecosystems in North America. Additionally, much of the biological research which has been accomplished in southeast Alaska was done in northern southeast, while the vast majority of logging occurs in southern southeast. Consequently, there is a need to gather wildlife baseline data in the project area prior to initiating the type of activities proposed, and to also conduct wildlife population monitoring during and following project implementation.

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This is not being done for management indicator species, nor for

most other species of special interest. In addition to management indicator species, surveys and population monitoring should also be considered for marbled murrelets, goshawks, wolves, and Vancouver Canada geese.

Wildlife surveys should also be conducted in the project area to locate nests and other important habitats. For birds, nesting surveys should be conducted during the prime nesting period for each of the individual species. Roads, camps, and harvest units, should be examined and designed to prevent impacts to or disturbance of important habitats of rare or uncommon species.

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The goshawk population in southeast Alaska has recently been the subject of a status review by the U.S. Fish & Wildlife Service (USFWS). Goshawks have been observed (infrequently) in the project area. The FEIS should discuss the likelihood of protecting or maintaining goshawks which may use the project area. Also, how much of the area has been surveyed for goshawks, which surveys were conducted according to FS protocol, and what is the estimated effectiveness of locating goshawks in the units the ROD proposes to harvest? Special provisions, similar to those suggested by the USFWS for the SE Chichagof Timber Sale, need to be implemented by the FS to address goshawks. Survey and inventory work, along with monitoring and the collection of data, also needs to be accomplished.

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Statements regarding marbled murrelets are also misleading in that a reader could think that something significant is being done to protect murrelets. Even though "Interim Standards and Guidelines for marbled murrelets call for leaving a 30 acre wind-firm buffer around all nests discovered" (p. 3-108), the DEIS gives no indication of the probability of finding a nest before it is cut, or whether or not this is an effective mitigation measure. As only one marbled murrelet nest has been discovered in southern southeast Alaska in 40 years of industrial scale logging, the likelihood of actually pin-pointing specific nest trees prior to cutting appears small. So, even though a Standard and Guideline exists for when a murrelet nest is found, of what practical use is it if we are unable to actually identify specific nest trees prior to cutting? Snag management standards and guidelines have similar short-comings.

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As written, the effectiveness monitoring program for deer on page 2-57 is flawed. A problem with logging is that it exacerbates the bad effects of severe weather on deer. It can always be claimed that weather is "equally" as responsible as logging for deer population declines because they act together to cause those declines. So many factors influence the number of deer harvested from an area in a year that simply reviewing harvest ticket data is inadequate monitoring. A question that monitoring should address is whether after winters of severe weather, deer population declines are greater in logged areas than in unlogged ones. That would require a greater investment in time and resources than simply examining harvest ticket data, but it would

give more useful information.

In general, the wildlife survey, monitoring, and mitigation measures proposed by this DEIS are weak and will not significantly protect important wildlife habitats. To make significant progress in improving this situation, professional and comprehensive wildlife surveys need to be initiated in the field. The ROD should commit to effectively monitoring wildlife populations in project areas as a result of the impacts caused by action alternatives. Appropriate thresholds of impact need to be identified, and plans for effective mitigation measures applied.

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(6) **Reductions in subsistence and sport-hunting opportunities.**

As habitat capabilities decline, so will the ability of local subsistence and non-local sport hunters to harvest deer and other species in the project area. Sport hunting opportunities, presently taken advantage of primarily by Ketchikan hunters, will be lost first. The DEIS goes on to recognize that "there may be a significant possibility of a significant restriction of subsistence use of deer and some furbearers within the Project Area for all alternatives in the future" (p.2-26). On page 3-225 (and 224) the DEIS reiterates that there is "a significant possibility of a significant restriction of subsistence uses of deer and marten." The ANILCA 810 analysis, though, concludes that, "The actions proposed in Alternatives 2-6 will not represent a significant possibility of a significant restriction on subsistence use of deer and certain furbearers in the Project Area." Consequently, these statements in the DEIS are confusing and contradictory. The justifications for proceeding with this project after findings of significant restriction have been made are not convincing.

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(7) **The FS does not consider the reduction in wildlife as an economic loss, nor does it attempt to compute the value of this loss.**

Except for sport hunting expenditures, the FS appears to assume in the North Revilla DEIS that the wildlife in the project area is of little or no economic value. Consequently, in the economic analysis, the DEIS does not compute the loss of wildlife as an economic loss. Methods exist to do this, however. As a part of university course work, and in studies of other projects, (i.e. the Exxon Valdez, for example), the loss of wildlife has been analyzed and derived to be significant. What are the tradeoffs of the proposed project in terms of its potential economic losses of wildlife over the course of the rotation? To know the true costs of the proposed action, it is first necessary to determine and include the anticipated wildlife losses in the economic computations. An understanding of this is important in making an informed decision in the ROD for this project.

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(8) **Harvesting in proportion to volume class occurrence and the**

timber type database.

The TTRA directs the FS to avoid laying-out timber sales which result in a disproportionate amount of harvest in the highest volume classes. Unfortunately, there are recognized inaccuracies concerning the timber inventory and the timber-type database being used to monitor compliance with proportionality rules. One FS report explicitly indicates that the database is not accurate enough to identify the location of high volume timber on the ground. As expressed in State comments on several previous long-term sale EISs (Kelp Bay, SE Chichagof, N&E Kuiu, CPOW), the accuracy of TIMTYP data for TTRA proportionality requirements is clearly an issue of considerable concern to the State. The main objection is that the TIMTYP database contains significant variation in volume estimation and classification on a site-specific basis. The State has requested that project area monitoring plans include methods to critically test the reliability of the TIMTYP database to actual unit harvest volume. The North Revilla DEIS effectiveness monitoring plan on proportionality does not do this, it merely checks to see if the unit is mapped correctly in the TIMTYP database. But TIMTYP database volume classifications are inaccurate for site-specific applications, as the Forest Service admits. The monitoring plan should be changed to measure actual harvest unit volumes and compare them to what TIMTYP predicted. Prior to implementing a ROD, field surveys should be accomplished to identify the actual locations of high volume timber and verify the amount and proportionality of volume classes 4, 5, 6, and 7 in the project area.

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An additional point on proportionality; TTRA refers to "volume classes 6 and 7 as defined in TLMP." In TLMP, volume classes 6 and 7 are defined as having greater than 30 mbf/acre. Page 3-159, Table 3-66 indicates that stands mapped as volume class 5 have more than 30 mbf/acre. It thus seems that stands mapped as class 5 are, by TLMP's definition, actually volume class 6 stands. If so, shouldn't the stands mapped as class 5 also be harvested proportional to their occurrence in the management area?

(9) The need to limit timber harvest to areas shown within unit boundaries as exhibited by the ROD.

During previous timber planning efforts some unit boundaries have been expanded beyond those shown in the ROD. This type of modification does not allow the public or agencies the opportunity to review or comment on such timber harvest. Although there may be a need to drop some areas from timber harvest in order to meet standards and guidelines, any increases or significant modifications to unit boundaries, especially in areas of high value fish and wildlife habitat, to make up that volume; should undergo additional review. In some instances this has occurred, but in some it has not.

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(10) The importance of the Traitors Cove drainage and Salt Chuck as a critical fish and wildlife habitat.

The Traitors Cove drainage is a unique and prolific fish and wildlife habitat, the most productive in the project area. This complex, diverse, and highly active food chain results primarily from the combination of the large anadromous Traitors Creek drainage (containing one of the largest salmon runs on Revilla Island), which flows into an even more unique and uncommon estuarine habitat (Traitors Cove Salt Chuck), bounded by another extremely important marine bay (Traitors Cove), all of which is surrounded by some of the least fragmented high-quality old-growth habitat currently found in the project area. The Traitors Cove drainage is also strategically located adjacent to the Naha, and the two areas together are more effective in forming a core Habitat Conservation Area for this biogeographical province. This is especially important for those species of wildlife which rely on large areas of high-quality old-growth. Their long-term viability can be more adequately assured by attempting to keep this area as intact as possible. Generally, impacts during this entry can be located elsewhere, which we recommend be accomplished for most of the units, certain portions of roads, and the two new log dumps proposed in Traitors Cove.

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Such an approach would have benefits to the overall ecosystem of the project area, and could be accomplished without affecting the volume of the proposed timber harvest. Species of concern compose all portions of the food chain. However, the more conspicuous fauna, which are typically more abundant and diverse in Traitors Cove than other parts of the project area, and deserving of particular consideration, are species such as wolves (requiring large areas), large natural runs of salmon (requiring aquatic habitats like Traitors Creek, Salt Chuck and Cove), trumpeter swans (a designated sensitive species requiring habitats like the Traitors Salt Chuck), marten (dependent upon mature forests and sensitive to fragmentation and roaded access), black bear (with robust but vulnerable productivity which favor major salt chucks and drainages with abundant runs of salmon), loons, land otters, seals, and shrimp (all dependent upon the rich food chain available in aquatic habitats such as Traitors Cove and Salt Chuck).

In order to maintain some of the more important wildlife values in the project area, it will be essential to minimize the amount of logging proposed in most of VCU 739 (Traitors Creek and Traitor's Cove Salt Chuck), and the northern portion of VCU #738. We have provided specific recommendations for units to delete in this entry (Attachment A). The concept of reduced cutting in this area is not only essential for maintaining wildlife values, it is also consistent with the current Forest Plan and the proposed revised Forest Plan. The Traitors Cove Salt Chuck drainage is a LUD III area, which is not designated for maximum timber harvest. "Potential timber yields will be reduced to the extent needed to protect important biological and aesthetic

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values" (p. 1-14). With the extensive amount of past timber harvesting which has already occurred here, it would be difficult to justify anything other than minimal logging in this area during this new entry. This same area, in the revised TLMP, is identified as "Modified Landscape." This directs that there be no more than a slow reduction in the amount of old-growth (p. 1-21). Consequently, the accelerated harvest proposed for Traitors Cove in this EIS, if selected in the ROD, would seem inconsistent with both Forest Plans.

Also of particular concern are the large natural salmon runs in Traitors Cove, and the important commercial and personal-use shrimp and dungeness crab fisheries currently available. #2 Traitors Creek is the main pink salmon index system (101-90-029) for this area, with one of the largest escapements on Revilla #9 Island, ranging from 100-200,000 annually. Although we do not accurately know interception rates, total runs (returns) may be in the vicinity of 600,000 pink salmon.

Traitors Creek also contains up-welling gravel areas important to the production of chum salmon, and produces one of the better returns of chum salmon in the area, with annual escapements ranging from 10,000 to 15,000. Coho salmon and steelhead trout area also produced in this system.

Including other anadromous systems in Traitors Cove, total escapement in this area can reach close to 270,000 pink and 15-20,000 chum salmon. As these escapements are in addition to returns which are intercepted during the commercial purse seine openings in west Behm Canal, total run size produced by streams in Traitors Cove could peak at a range of 500-830,000 pink salmon and 15-20,000 chum salmon. In addition, the FS has constructed a fish pass on Marguerite Creek, which will increase the production of future runs to Traitors Cove.

The cove is also an important producer of shrimp and dungeness crab. Along the shore of the eastern portion of west Behm Canal, Statistical Area 101-90, commercial landings for shrimp have ranged typically between 10-18,000 pounds, with the majority coming from the outer portions of Traitors Cove, where two new log dumps and increased log rafting, towing, and storage activities are proposed. For dungeness crab, the commercial harvest has ranged between 10-21,000 pounds with a major percentage of this coming from the Traitors Cove area. Other commercially harvestable species, such as sea cucumbers are (as referenced by the dive reports) also located in the cove, and occur in commercial quantities on-site at the proposed log dump locations. Additionally, the area has also been a important subsistence and personal use harvest area, especially for shellfish stocks. None of these points are adequately considered in the DEIS.

(11) Alternatives are available and need to be implemented for

the two new log transfer facilities proposed in the biologically important estuarine and aquatic marine habitats of Traitors Cove.

19 41 Important commercial, personal-use, and subsistence fisheries could be in direct conflict with the two new log transfer facilities proposed in Traitors Cove. As explained above shrimp, dungeness crab, and sea cucumbers are of particular concern.

In addition, the cove is essential to a very large number of outmigrant salmonids that move into this area for a portion of their early-marine life cycle. If it is assumed there is about a 1% survival rate between outmigration and returning adults, then there could be approximately 85 million juvenile pink and chum salmon outmigrants dependent upon Traitors Cove for survival in the early-marine phase of their life cycle. They may typically spend several weeks to a month in Traitors Cove, and may be utilizing the areas proposed for the log transfer and ancillary facilities. The DEIS fails to adequately evaluate potential impacts or analyze whether or not these facilities could affect the overall carrying capacity of juvenile salmonids occupying Traitors Cove. The DEIS admits, however, that "the effects of 35 LTF's on fisheries resources have not been quantified" (p.3-361).

The FEIS should also evaluate the problems of human access to these resources. Would, for example, access (especially the placement of pots) be blocked or otherwise obstructed by the rafting, storage, or towing of logs? It is essential to not only 5 maintain the quality of the Traitors Cove estuarine, marine and benthic habitat for its important biological values, but it is 6 also necessary to provide for continued, unobstructed access for 41 persons utilizing these resources.

The DEIS inadequately incorporated the dive-site information for these two LTFs. It does not discuss the fact that the NW Traitors Cove Site (#18) was the most productive of the sites visited on a three-day dive trip, or that commercial quantities 19 of sea cucumbers were noted in the area. It also fails to 41 mention that the site does not meet the Timber Task Force LTF siting guidelines, or that there is a feasible and prudent alternative.

A similar situation exists for the North Traitors Cove Site (#22), located about 0.6 mile west of the Salt Chuck's tidal race. The DEIS fails to discuss the fact that this site was found to be a biologically productive site which did not meet the Timber Task Force LTF siting guidelines. It does not mention the commercial quantities of sea cucumbers on-site, or that a 41 feasible and prudent alternative is available at SW Neets Bay. Also, the bald eagle nest surveys conducted by the USFWS in 1992 within the project area should be used to describe potential conflicts with roads and LTFs. Additionally, important upland habitat and high-volume deer winter range is located adjacent to the proposed North Traitors LTF. These deficiencies need to be addressed in the FEIS.

LTF #18, at NW Traitors Cove (Virgin Bay), is located on state selected land which was nominated by the Ketchikan Parks Advisory Board and the State Division of Parks. Virgin Bay was recognized as having park-like qualities, and was selected for its recreational potential. Although this use appears to be incompatible with the establishment of an industrial log transfer facility, the DEIS failed to address the issue.

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These are coastal consistency issues which may be best resolved by utilizing the present LTF located only a few miles away in SW Neets Bay. The use of this site would involve only about 0.7 miles of road construction. The DEIS failed to compare the costs of this with the half-million dollars needed to build the two new log transfer facilities, plus constructing the 1.8 miles of road needed to access the proposed new LTFs.

(12) The Traitors Creek-Margaret Bay Road Connection is detrimental to wildlife, is not essential to this project, and should be avoided in the Record of Decision.

On March 20, 1992, ADF&G sent a letter to the planning team detailing our concerns with the proposed Traitors Creek to Margaret Bay road connection and requested that this connection not be made. The DEIS, however, failed to address this concern, along with other items mentioned in this letter and its attachments. Because the DEIS did not mention these concerns, we believe it does not thoroughly consider or accurately assess the environmental impacts of this road to important wildlife habitat and resources in the area. The road connection, however, is not essential to the project, which is pointed out in the DEIS, "this road connection is not needed to haul timber harvest units in the action alternatives" (3-330). This connection involves 1 to 2.5 miles of new construction at a cost of $350,000-$710,000 (a FS estimate). To avoid non-essential construction and unnecessary wildlife impacts, this road connection should be excluded from further consideration in the ROD.

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(13) The FEIS should more specifically address the potential for cave resources within the project area.

Although the DEIS states that "there are no known occurrences of carbonate rock and associated cave resources within the Project Area (p.3-21), it appears these formations could be nearby (Bell Island), and are perhaps located within the boundaries of this planning effort. Perhaps the FEIS should examine this in more detail. If caves are found, appropriate protection of the biological and associated resources should be implemented.

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(14) Recommendations for unit selections under a maximum harvest alternative.

The FS has presented a total of approximately 13,929 acres for the consideration of timber harvest when all potential units are included under all possible alternatives. This potential pool of

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units contains about 423 mmbf. Of this amount, an estimated 6,700 acres, or about 200 mmbf, will actually be selected in the ROD for timber harvest. Consequently, the FS will exclude approximately one-half of the potential units from the final logging plan in this operating period when a single action alternative is chosen.

Although we would much prefer to see a ROD which chooses from a true range of alternatives emphasizing different levels of biotic capabilities, we can make unit-specific recommendations if a decision is made to proceed with a harvest of 200 mmbf under this EIS. Generally, we would seek to minimize wildlife impacts by, (1) postponing harvest in the more important unfragmented high-value fish and wildlife habitats, such as in Traitors Cove, and (2) dropping other specific units which have various types of resource conflicts. In order to assist the FS in choosing units which will still provide 200 million board feet for timber harvest, but temporarily avoid entry into some of the highest value wildlife habitats, we have attached a list of specific units to exclude from the ROD (Attachment A). This pool of units amounts to about 77 mmbf over an area of approximately 2,400 acres. We are also concerned about some units in Shrimp Bay, and perhaps in some other places. As the FEIS proceeds toward selecting a final alternative we would like to meet with the FS regarding the potential flexibility in perhaps excluding additional units.

(15) The Range of Alternatives is unnecessarily constricted, and is incompatible with the consideration of wildlife and other values.

The primary objective of a planning effort such as this should be overall resource management, not the harvest of a pre-determined level of timber volume which may or may not be compatible with other resource values. Alternatives should be developed around concepts such as wildlife values, biotic capabilities and sustained yield. The issues should be defined first, and then the alternatives developed around them.

It is our understanding that the regulations of the Council on Environmental Quality, which presides over NEPA implementation, in fact require that alternatives be developed which "sharply define the issues." In this instance we believe only one issue is presented; that of a specific timber target. All alternatives are developed around this particular issue. Consequently, the action alternatives are too similar to be "sharply defined" because the EIS does not allow the decision maker to determine how much timber should be made available in a specific entry while still adhering to the principles of balanced resource management for that area. When the development of alternatives is artificially restricted in this way, it does not provide a clear basis for a preferred option by the decision-maker and the public. This is further evidenced by the fact that an extensive overlap of units exists in all of the alternatives.

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The constricted range of alternatives is not a Forest Plan issue, because the Forest Plan does not analyze this project area in sufficient detail to accomplish the objective of maintaining balanced resource management for such a small area. Page 1-12 of the DEIS states that the DEIS makes no recommendations for site-specific amendments to provide old-growth habitat conditions and that such decisions are made by the Forest Plan. However, the present Forest Plan requires the implementation of an old-growth retention plan for wildlife, which has not been addressed by this DEIS. Clearly, there is flexibility for the project level planning team to include a broader range of alternatives that protects more old-growth wildlife habitat. If alternatives are included that accelerate the harvest of timber, then we suggest that one must be considered which better prolongs the maintenance of wildlife habitat.

This could be corrected by analyzing several harvest levels, in addition to identifying the old-growth retention required by the present Forest Plan. A variety of harvest levels would indeed help to "sharply define the issues" which are of most concern to those interested in this EIS. For example, what is needed to assure the maintenance of biological diversity in the project area, or what harvest level would best provide a steady but uninterrupted flow of raw wood fiber from the area until the end of the rotation? Different harvest levels based upon such precepts could provide the range of alternatives necessary in forming a clear and reasonable basis for making a final choice.

ANILCA 810 ANALYSIS

The Division of Subsistence recommends the North Revilla FEIS be patterned after the subsistence analysis of the Southeast Chichagof Timber Sale. They recognize that the North Revilla DEIS is not nearly as thorough as the SE Chichagof document in a number of critical ways. Their specific concerns and suggestions for improvements are as follows:

1. The DEIS does not systematically examine impacts on deer hunting patterns on a WAA and on a community basis. To this the EIS should describe and analyze the total subsistence hunting patterns of the affected communities. It is not acceptable to limit discussion only to the project area, the reason being that there are other timber sales underway, such as the upper Carroll and Three Creeks Sales, which may affect these same communities.

2. The DEIS does not present and discuss habitat capability and changes to habitat capability for deer for sufficient time periods. Years 1954, 1990, 2010 (or end of sale), and 2040 need to be used.

3. The DEIS incorrectly assumes that subsistence demand will not increase over time. No rationale is presented in defense of this and there is no historical or demographic evidence to support it. The DEIS should follow the SE Chichagof FEIS which

includes a model for projecting deer demand (present and future harvest) versus supply (10% of habitat capability) over the next fifty years.

4. The DEIS does not readily distinguish and analyze effects from logging under the North Revilla project and overall cumulative forest-wide effects of logging. Here again, the SE Chichagof plan should serve as a guide to the planning team as to how to analyze project-specific versus cumulative forest-wide effects on each community's subsistence.

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5. The DEIS does not present maps showing cumulative effect of logging in the Tongass N. F. See the SE Chichagof FEIS (Appendix) which incorporates GIS mapped analysis of deer supply (10% habitat capability) vs. demand (present and future harvest) over the next fifty years. This kind of spatial analysis is critical for the public to understand both the project-specific and region-wide impacts on subsistence. A similar kind of analysis may be in order for marten and black bear.

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In addition to these problems in the analysis, we have some general concerns. First, the rationale for the selection of the project area and scheduling of this sale is not adequate. Alternative project selection and scheduling are not discussed and the action alternatives proposed are narrow in range and may not examine all reasonable alternatives.

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Second, the justifications for proceeding with this project after findings of significant restriction have been made are not convincing. See comments on the same issue for the SE Chichagof Plan. The reasoning put forth in the second to last paragraph on page 3-224 strikes us as especially specious and a poor rationalization.

Third, the discussion of mitigation of subsistence impacts is minimal and sometimes unclear. For example, the DEIS appears to propose restrictions on sport hunting of deer (at 3-223). We are not clear that this is a recommendation made by the DEIS or a possible mitigation measure.

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As time permits, we are willing to do further work with the planning team to improve the subsistence analysis before issuance of the FEIS.

SUMMARY RECOMMENDATIONS

In closing, we would like to especially reiterate the following specific concerns: (1) Traitors Cove, Creek, and Salt Chuck are particularly important for their fish and wildlife values, and we request that timber harvest in this area be minimized by the ROD during the forthcoming entry; (2) To further alleviate and mitigate the impacts to wildlife in this area, the non-essential road connection between Traitors Creek and Margaret Bay should be

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omitted from the ROD; (3) A feasible and prudent viable
41 alternative to the two new LTF's proposed in Traitors Cove exists at the SW Neets Bay facility. To avoid numerous conflicts with valuable aquatic resources, important upland habitats, and human-use, the ROD should select the SW Neets Bay LTF for the salt-water transfer of timber from the units in this area.

In a broader perspective, we believe that the range of
15 alternatives in this DEIS is unnecessarily constricted.management within the project area. Consequently, the alternatives presented cannot be used to "sharply define the issues" as required by the Council on Environmental Quality. Because of this, the decision maker lacks the necessary flexibility to
32 decide how much land to make available for harvest and still adhere to principles of balanced resource management, which are site-specific to the project area. This problem, though, could be alleviated by analyzing a wider range of harvest levels within the Project Area. Although, we recommend this be accomplished in the FEIS, the FS may still decide to harvest 200 mmbf from the area during the next operating period. If this happens, then our recommendations for which units to exclude so as to better
19 provide some additional protection for important fish and wildlife habitat are described in Attachment A.

Thank you for the opportunity to comment.

Attachment

cc: Dave Rittenhouse, FS, Ketchikan
Jim Ferguson, ADEC, Juneau
Daryl McRoberts, ADNR, Juneau
Frank Rue, ADFG
Jack Gustafson, ADFG
Dave Anderson, ADFG
Bob Schroeder, ADFG

SPECIFIC UNITS TO EXCLUDE FROM HARVEST

Listed below are units, by area, ADF&G recommends deleting from a Record of Decision in the next North Revilla operating period. This would have benefits to wildlife, although they would last only for as long as the units left uncut remain as old-growth. This alternative still provides for more than the target volume of 200 mmbf. The units with the highest priority for deletion are designated by the numbers in parenthesis, and are ranked according to their desirability for deletion from the ROD (1=most desirable for deletion). Note that settings which have overlapping unit numbers are grouped.

TRAITORS CREEK/SALT CHUCK (VCU 739)

(1) 9029, 59, 60, 85, 86, 99	(2) 9024, 9095
(1) 9030, 9087	(2) 9025, 9083
(1) 9031	(2) 9106
(1) 9032, 9061, 9088	(2) 9027, 9062, 9097
(2) 9033	(1) 9028
(2) 9034, 9058	(2) 9053
(2) 9036	(1) 9056, 9103
(2) 9037	(2) 9063
(2) 9038, 9057, 9101	(2) 9065, 9108
(2) 9040	(1) 9028
(1) 9041	(2) 9100
(1) 9017	(2) 9106
(1) 9018, 9055, 9094	(2) 9193
(1) 9019	(1) 9082
(1) 9020	(1) 9078
(1) 9021	(2) 9066, 9070
(2) 9023, 9064, 9096, 9084	

TRAITORS SALT CHUCK (VCU 739)

(1) 9001	(1) 9008
(1) 9068	(2) 9042
(1) 9002, 9075	(2) 9043
(1) 9003	(2) 9044, 9104, 9090
(1) 9005, 9048, 9077	(1) 9047, 9092
(2) 9091	

TRAITORS COVE (VCU 738)

(2) 8001, 8090	(1) 8053, 8063, 8088
(1) 8030	(1) 8054, 8064

NA 876

MEMORANDUM

STATE OF ALASKA

Department of Environmental Conservation

TO: Lorraine Marshall
Project Review Coordinator
OMB-DGC

DATE: February 1, 1993

FILE NO: AK921223-07J

THRU:

TELEPHONE NO: 465-5365

SUBJECT: North Revilla DEIS

FROM: Jim Ferguson JMF
Program Coordinator, Forest Practices
Southeast Regional Office

The Department of Environmental Conservation has reviewed the DEIS for the North Revilla Long-Term Timber Sale (LPK). This sale proposes to harvest between 174 and 260 MMBF of timber on 5,769 to 8,585 acres. Proposed road construction and reconstruction ranges from 133 to 201 miles. Six reconstructed and one to three new LTF's will be used. The LTF's will be subject to a separate ACMP review, and will be approved subject to the issuance of an ADEC Certificate of Reasonable Assurance (401 Certification).

Our comments are intended to assist the U.S. Forest Service (USFS) in the preparation of a Final EIS that will be consistent with the Alaska Coastal Management Program (ACMP) and Section 319 of the Clean Water Act (Section 319). The latter comments are offered under the authority of Section 319(b)(2)(F) and 319(k), which give States the authority to review Federal projects for consistency with State nonpoint source pollution management plans. The State of Alaska's plan is the Nonpoint Source Pollution Control Strategy (Strategy). Further, ADEC will be working with the Forest Service under the terms of the USFS/ADEC Memorandum of Agreement, which describes in detail how the State and the Forest Service will implement the Strategy.

ACMP CONSISTENCY COMMENTS

1. In our meeting at DGC with the USFS, Ketchikan Area on October 13, 1992, the USFS indicated that the unit cards included in the upcoming DEIS documents would be closer to the Phase II cards currently used on the Thorne Bay Ranger District than those included in past EIS's. While we agree that the cards show significant improvement over past Phase I cards, we have some concerns. These concerns would have to be addressed to make any unit-specific analysis worthwhile at this stage in the planning process.

We noted that the unit cards are nearly complete in terms of all of the specialists' recommendations being included in the unit cards. However, many of these recommendations appear to be generic and only minimally site-specific. This situation is particularly true for the Fish/Watershed recommendations. Unless further information is submitted, a meaningful, site-specific analyis of the cards will have to wait until the FEIS. We hope that such site-specific information is included in the FEIS. The inclusion of site-specific recommendations is the only way to avoid extensive unit card and/or field reviews prior to harvest.

The State is working on a list of consistency issues for unit cards, as part of the review process for the Central Prince of Wales DEIS. This list should be applicable to the North Revilla DEIS as well.

2. We noted that, on a number of unit cards, the soils specialist recommendations included a statement that: "This unit has a significant possibility to have areas reclassified as MMI = 4 [very high MMI]." Such areas represent potential sediment sources due to erosion and mass wasting. We assume that such areas or units will be deleted before the units reach the final layout stage, and that this information will be made available in the FEIS. If it is not, then we may have to consider layout-stage unit card reviews and/or field reviews for specific units.

The soils section of the unit cards was very complete, and was well thought out. We would like to commend the Forest Service for their excellent advance work on unit-specific soils concerns. The soils information included in the planning-level unit cards should be a model for other timber sale EISs.

NEPA COMMENTS

1. The discussion of mitigation (pp. 2-39 and 40), was generic in nature, and far less useful than the discussion provided in the Central Prince of Wales DEIS. The inclusion of information in the kind of detail provided in the Central Prince of Wales DEIS makes it easier to track resource concerns on specific units.

2. We are interested if a conscious effort was made to incorporate concepts of ecosystems management into this project, including the objective of relying less on clearcutting as a forest management tool. If such concepts were applied, we would like to know what they were. Also, is effectiveness monitoring (silvicultural and/or other) proposed for the units for which partial cutting is prescribed? These units would appear to provide an opportunity to study alternative harvesting techniques, with the possibility of relying less on clearcutting as a silvicultural system in Southeast Alaska.

SECTION 319 CONSISTENCY COMMENTS

1. Implementation Monitoring

A. The implementation monitoring plan appears to be comprehensive, and covers most of the issues of concern to us. We suggest that, on pg. 2-43, under Roads--Soil and Water Protection, that the objective of this monitoring be better defined. As it is, it is too general to be effectively applied, and needs to be more specific.

B. On pg. 2-44, under Water Quality and Fish Habitat: are layout and administration employees going to be trained in the conduct of BMP implementation monitoring? Currently, the Area hydrologists and soil scientists are doing this monitoring. Given that it has taken two years for them (and ADEC) to become proficient at this work, how does the Ketchikan Area (or, the Ketchikan Ranger District) propose to train timber and engineering staff in monitoring? ADEC would be interested in working with the Forest Service on designing and, if time allows, conducting such training.

2. Effectiveness Monitoring

A. Page 2-49, Water Quality and Fish Habitat:

In the introduction to this section is this statement: "An effectiveness monitoring program is being developed on a forestwide basis in consultation with the State of Alaska." We are not aware of any such ongoing effort. The last meeting on the preparation of a forest-wide effectiveness monitoring program was held in July 1991. Under the time table set out in the Alaska Nonpoint Source Pollution Control Strategy, such a program or action plan was due to be developed by September 1991. Since the July 1991 meeting, the forest-wide effort appears to have stalled. We have received a proposed effectiveness monitoring action plan from the Chatham Area, and are not aware that any forest-wide plan is being prepared. If the Ketchikan Area is working on such a plan, we would like to know of it, and would like to be involved in its development.

Also, while we believe that stream buffer windfirmness (the topic proposed for water quality monitoring) is an appropriate and important subject for BMP effectiveness monitoring, we feel that there are other important issues that should be addressed. We suggest that the Ketchikan Area consider the effectiveness monitoring plan in the Southeast Chichagof Timber Sale FEIS (including the monitoring errata sheet) and the associated draft effectiveness monitoring action plan for the Chatham Area as a good example of a plan to monitor the effectiveness of BMP's on water quality and fish habitat.

B. We are aware that there are at least two small-scale BMP effectiveness monitoring projects ongoing on the Ketchikan Area. To date, we have received one brief interim report on one project. We suggest that the Ketchikan Area consider continuing or expanding these projects, and applying them to the North Revilla project. We also would be interested in receiving any reports of progress on these projects.

C. We are interested in knowing more specifics of proposed water quality- related monitoring. For example, what data exists, and what current and proposed programs exist, for establishing water quality baselines on the project area? Such information is important if project impact and BMP effectiveness monitoring are to be conducted. Has the Ketchikan Area proposed a budget for BMP monitoring over the life of the project? Do QA/QC plans exist for water quality- related monitoring? Are there plans to coordinate or integrate BMP monitoring for this project with the project areas on Prince of Wales Island (Central Prince of Wales, Lab Bay, and Polk Inlet)? These and other questions need to be posed and answered in order to collect valid monitoring data, and in order to avoid duplication of effort on different projects.

D. In the unit cards, we were pleased to see the references to BMP's made by the soils, timber, and engineering specialists. Such references are important both in assuring that BMP's and other resource prescriptions are documented and implemented, and in simplifying and improving the BMP implementation monitoring process. We are, however, concerned that the Fish/Watershed comments did not include BMP references. See also our ACMP comments, section 1. In our review of the format for including fish/watershed specialist prescriptions in the unit cards, we noted implied references to (at a minimum) BMP's 12.6, 12.7, 13.9, and the several sections of BMP 13.16.

The reference to "BMP 14" (in regards to minimizing the potential for landslides) in the engineering specialist prescriptions we assume refers to the introduction to Section 14 (Transportation Facilities) in the BMP Handbook (FSH 2509.22). If more specificity in the prescription of BMP's is desired, we suggest that one or more of BMP's 14.2, 14.3, 14.6, and 14.7 be cited, depending on the site-specific situation. Each of these BMP's relates in some way to the minimization of landslide potential. In addition to making each prescription more specific, this procedure will make the BMP implementation monitoring process easier and the results more meaningful.

E. We are interested if any watershed sensitivity models were run for cumulative effects, sediment transport, or temperature. The results of running such models would be useful both for assessing potential water quality impacts for the project and in determining sites for specific types of BMP effectiveness monitoring. Also, it was noted at one point that Klu and Klam Creeks "may be described as potentially temperature sensitive." Has a determination been made on these creeks? If so, what, if any, mitigation is proposed?

F. We question the usefulness of the "Windthrow risk" information included in the unit cards. Unless we missed one, all of the units are classified as being "H", which we assume means "High." To be useful, information regarding the risk of windthrow would need to be more site-specific, and would need to be tied to some form(s) of mitigation.

We appreciate the opportunity to comment.

cc: Dick Stokes, ADEC, Juneau
Eric Decker, ADEC, Juneau
Daryl McRoberts, ADNR, Juneau
Rick Reed, ADF&G, Juneau
Dave Rittenhouse, USFS, Ketchikan ✓
Wayne Elson, USEPA, Seattle